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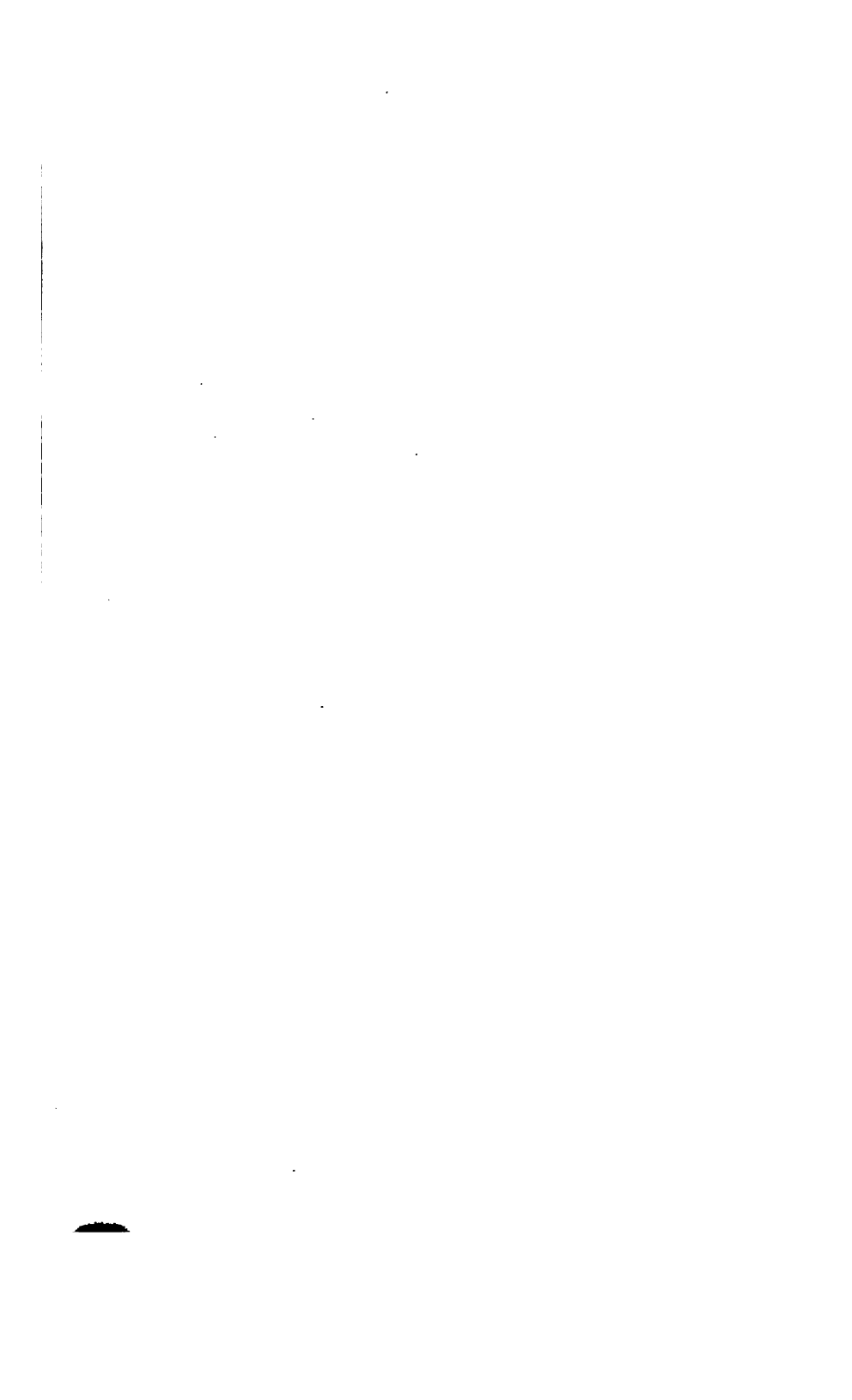
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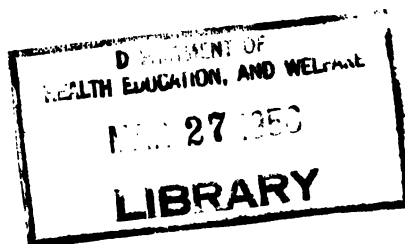


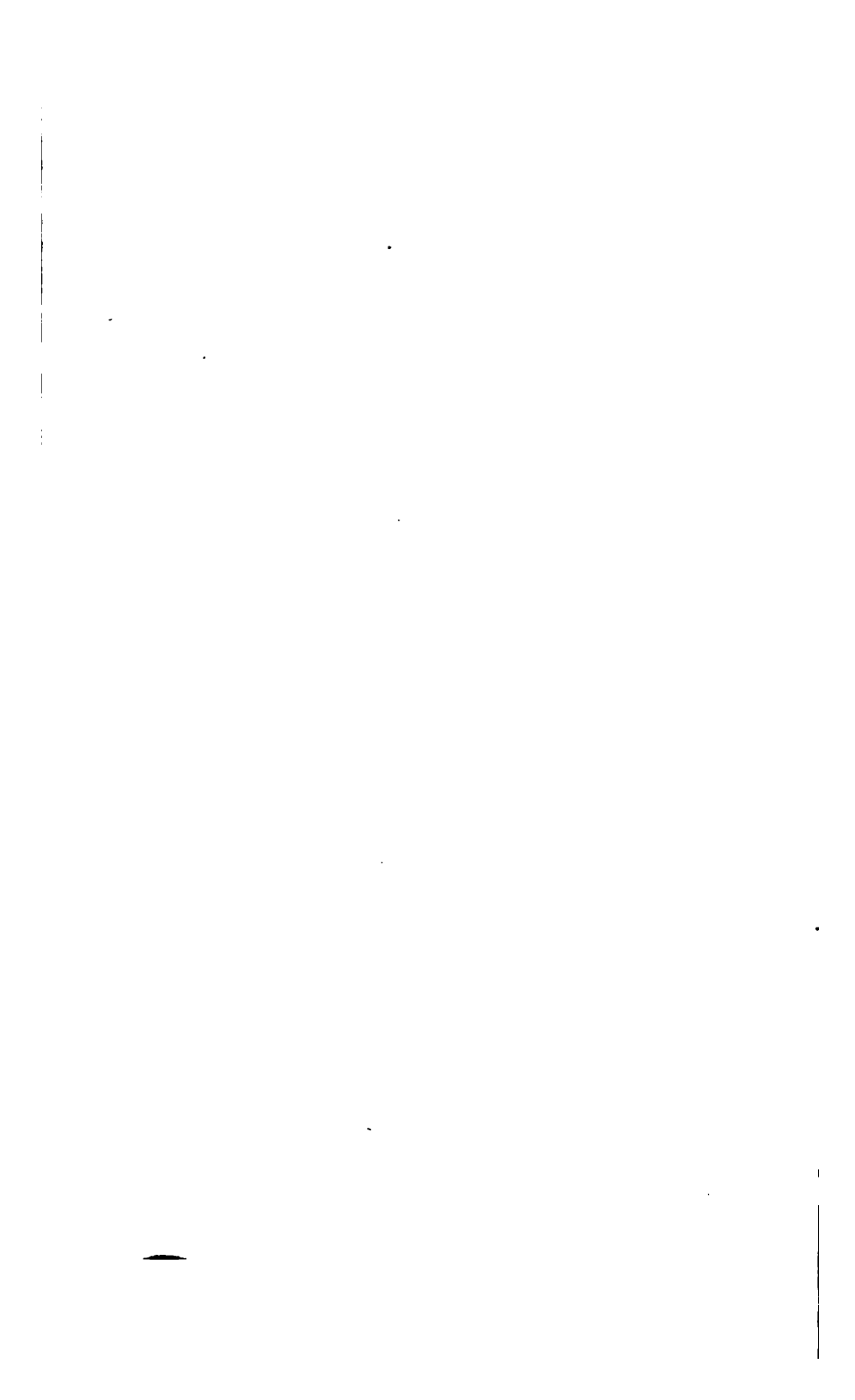
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THE

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Indiana School Journal:

PUBLISHED ON THE 15th OF EACH MONTH,

7309

BY THE

INDIANA STATE TEACHERS' ASSOCIATION.

GEO. B. STONE, RESIDENT EDITOR, INDIANAPOLIS.

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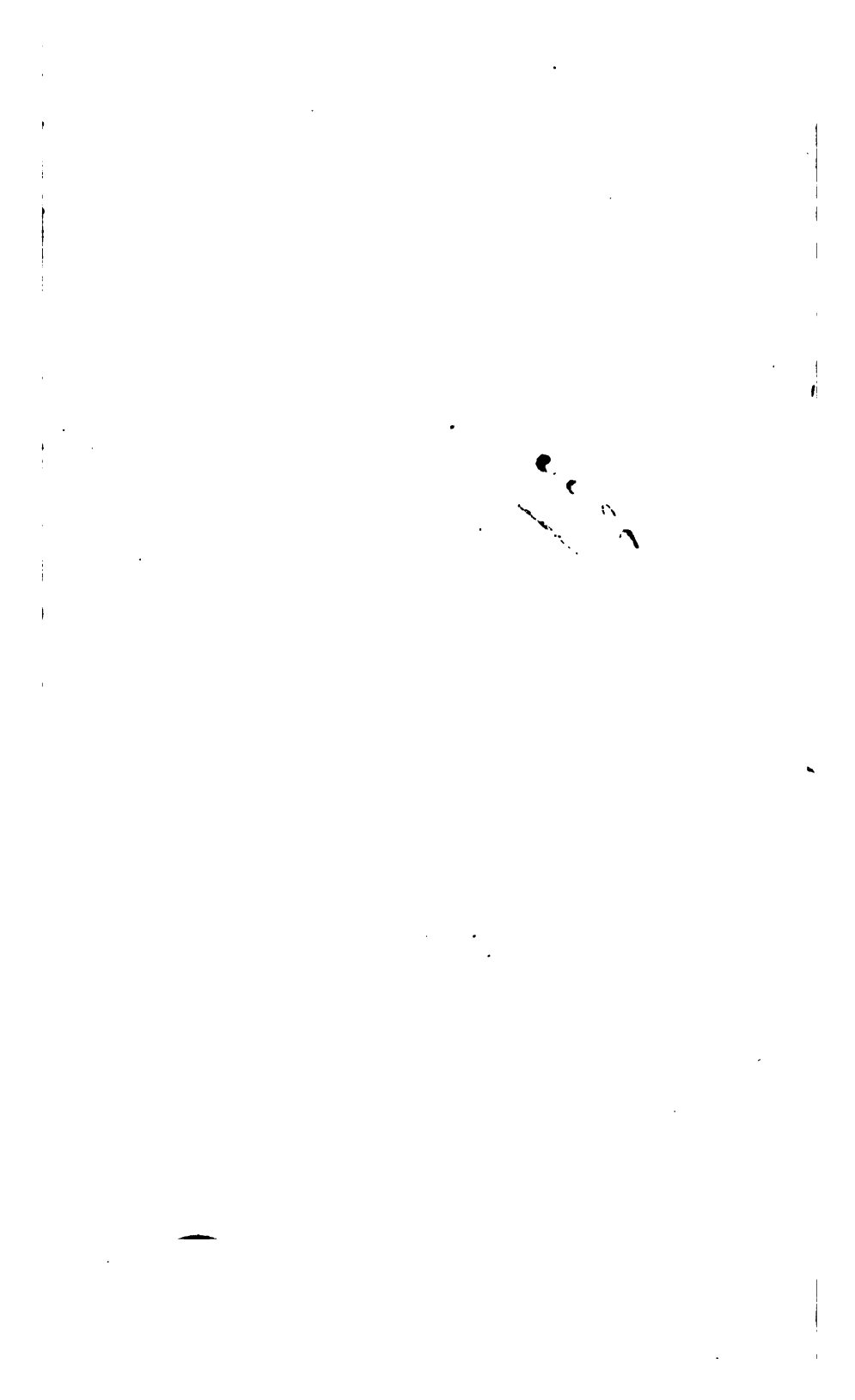
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THE Indiana School Journal.

VOL. II. INDIANAPOLIS, JANUARY, 1857. NO. 1.

ANNUAL MEETING OF THE INDIANA STATE TEACHERS' ASSOCIATION.

REPORTED BY ALEXANDER WILDER.

THE Indiana State Teachers' Association convened at Indianapolis on Monday evening, Dec. 29, 1856. Prof. Thompson, of Hanover College, called the Association to order, and the Rev. R. A. Abbott, of Dunlapville, supplicated the Throne of Grace. Mr. E. P. Cole, of Evansville, announced the absence of the Recording Secretary, on which W. J. May, of New Albany, was chosen Secretary *pro tempore*.

Prof. Larrabee, State Superintendent of Public Instruction, elect, was now introduced to the Association. He welcomed the members of the Association to the Capitol, and declared that Indiana bids the Teachers, from the East, welcome among them. "You come," said he, "to do us good, to advance the cause of education; you come to live, to make your home with us. To others, this is your native land; you are attached to this country by a feeling acquired from your whole lives. You are welcome, whence you came. Welcome, thrice welcome to the field of enterprise, vacant, long vacant for you. We have all the material for wealth, progress, and greatness. The State affords every variety of soil and almost of climate. On our plains grow the grains and grasses, indigenous to the temperate zone. Not one-fifth or indeed one-tenth of the soil is under a state of cultivation; yet how immense the products; over \$100,000,000 in value. Along the Wabash I could produce six counties which would produce more than all the New England States, with a good piece of New York thrown in. Our soil will produce enough for all the people of the

United States; we have coal enough to last a thousand years, timber enough to build the houses, and iron for all the manufactories. Now there is not a county in the State, the inhabitants of which can not reach the Capital in a day. No State has a capital more accessible. Our friends from Vincennes, Laporte, South Bend, the extremes of the State, can take their breakfast at home and their dinner with us."

In reference to education the speaker said, "the people of Indiana are a thinking people; they love education; they are not opposed to schools, but only question the manner of effecting it. Our township library system, the best ever conceived, is working better than in any State where it has been adopted. Our people are liberal. They will pinch themselves to educate their children well. They are a religious people. They do more than is done in many communities to maintain religious institutions. Our children have, developed in a high degree, the sense of duty and honor. Perhaps the most formidable obstacle to well educating the young is the difficulty of retaining them in school long enough to perfect a course of study. There are too many avenues of business to distract the attention.

In no department of humanity has progress been more evident, than in the different schemes of education. He could remember when little of Geography was taught in the schools, except without maps. The school-books were the Spelling book and the American Preceptor. After a time, the Columbian Orator was introduced. English Grammar was pursued only in higher departments by those who meant to become learned. Arithmetic was taught on the slate without a book; they went only as far as Rule of Three; then there was taught in the highest, what is now taught at the lowest common schools. Our public schools now furnish education sufficient for the practical purposes of life. Our system is a liberal one, free from every influence of bigotry. So long as our schools include children of all religious opinions, the teacher mistakes his duty, if he says any thing offensive to the conscience of any pupil. The occupation of the teacher has its advantages and its disadvantages; among the latter are those of temper and impatience. A teacher can not fail to displease those who deem it their especial duty and privilege, to find fault on all occasions. Be patient with the boy: you once were yourself a boy, as wayward, perhaps, as the one whose misconduct you endure. Perhaps those traits, which in the boy occasion the teacher so much trouble, in future life insure his success.

The teacher's work is immortal, for he builds with imperishable materials upon a firm foundation. His foundation is immovable, though the waves of eternity dash against it.

The teacher's work, the work of enlightening and raising to its proper dignity the mind of man, will yet be accomplished. It may not be in my day, for time has whitened my hair and placed many a wrinkle on my brow. It may not be in your day, but the Superintendent of all, "who stretcheth out the North over empty space, who hangeth the earth upon nothing," who guideth the course of Arcturus and Orion, will see to it that the work is accomplished.

On motion of S. T. Bowen, of Indianapolis, a vote of thanks was presented to Prof. Larrabee.

The order of exercises was then read by Mr. Bowen, of the Executive Committee, when, on motion, the Convention adjourned to nine o'clock Tuesday morning.

TUESDAY MORNING, 9 o'clock.

The Association met at nine o'clock; prayer by Pres. Edwards, of Hanover.

On motion of Mr. Hurty, Prof. J. R. Challen, of Indianapolis, and M. C. Stevens, of Richmond, were chosen Assistant Secretaries. S. T. Bowen was chosen Treasurer *pro tem*.

Mr. Chase, of Greencastle, Chairman of the Committee for preparing an Essay on the obstacles to Public School Education in Indiana, was excused from delivering his report at this session.

A resolution was adopted, inviting editors and reporters to attend. Members were requested to present their names as they entered the house.

Prof. Bishop, of Hanover, then delivered a lecture on Phonetics. ✓

After the delivery of the address of Mr. Bishop, the meeting adjourned till 2 o'clock, P. M.

The discussion of the report on Phonetics was resumed in the afternoon, after which the report of Mr. Barnes, of New Albany, on Normal Schools, was read by Mr. S. T. Bowen. It was a memorial to the Legislature, stating that throughout the State there was a lack of good teachers, and their place supplied by unqualified teachers.

Report accepted, and a motion made for its adoption.

E. P. Cole hoped that if the State Superintendent meant to lay the subject before the Legislature, the report would be so modified as to coincide with his action.

Mr. Hobbs thought the subject ought to be further digested before further action was taken.

Mr. Terwilliger was desirous that Indiana should have a Normal School; he was proud that New York, his native State, had such a school; he esteemed the mission of the teacher as more glorious than any other, the ministry of the Gospel not excepted.

Mr. Hobbs wished the subject again referred to a committee, to confer with the Legislature.

Mr. May thought the report would come in place when they got ready for it; he had learned that in many parts of the State, schools were taught for only two or three months in the year. In such a case, with the narrow means possessed for paying teachers, it was not the time to do much in the way of a Normal School. The Prussian system was a good one on paper, but a miserable one in fact. This matter of a Normal School belonged properly to the Superintendent. The action presented was premature; there was exaggeration; there were multitudes better qualified to discharge the duties of teachers, than those duties were discharged. Teachers and parents should be more closely allied: the teachers were one class, and the parents another. They needed this reform more than they needed Normal Schools. He did not believe in this sounding out the ignorance of the people of Indiana; it did not do so well to tell family secrets.

Mr. E. P. Cole moved a committee of five, to nominate officers of the Association. Carried. Messrs. E. P. Cole, Abbott, C. Mills, Rhoads, and Estia.

Mr. McLane was deputed to prepare a certificate of membership, for those desiring to return on the railroads.

Dr. Bobbs was now introduced, and proceeded to address the Association upon Physical Education.

The report on Normal Schools was taken up and referred to the Standing Committee of the Association and the Superintendent of Public Instruction. The Committee was instructed to revise the memorial, present it to the next Legislature, and report at the next meeting of the State Association.

Adjourned till 7 o'clock.

EVENING SESSION.

The Association was called to order, and the following Committee on Editors announced: J. Hurty, Prof. Hoss, S. A. Estia, R. M. Johnson, H. B. Wilson.

Mr. Fillmore entertained the Association with a song.

The following resolution offered by Mr. Hurty was adopted :

Resolved, That the Treasurer present a report on the condition of the finances of this Association.

A discussion was held upon the time of holding the Semi-Annual Meeting of the Association.

The 6th of July was fixed as the period, but by a subsequent vote this was changed to the 11th of August.

Mr. Bryant, of Williamsport, was introduced, and addressed the Association.

A vote of thanks was adopted.

The order of exercises for Wednesday morning was now announced.

Prof. Hurty then proceeded to read a report upon the subject of memorializing the Legislature. It proposed an increase of the State tax to a figure sufficient to render the schools free, to furnish the *Indiana School Journal* to school officers, to increase school terms to six months, to provide for Teachers' Institutes in each Congressional District, at least once in each year.

The report was accepted.

Mr. Kent moved its adoption. In Jasper County, Public Schools were almost unknown; the people were dissatisfied; they would be willing to pay a heavy tax if they could obtain good schools. The Trustees were such in name only. Schools were not taught, but kept. If there were a Normal School where they could obtain teachers, they could accomplish a great deal at home.

Mr. Campbell remarked, that at a meeting at Lafayette, a committee was appointed to report upon the expediency of having District Superintendents. The Executive Committee had given no opportunity for this Committee to report, and he moved that certain resolutions, prepared by Mr. Hobbs, be read, and the substance of them added to the memorial to be presented to the Legislature.

Mr. Hobbs then read a series of resolutions.

Resolved, That the select Committee be requested to prepare a suitable memorial to our next Legislature, on behalf of this Association, for the establishment of one or more Normal Schools, as set out in the report made by Prof. Barnes; for an alteration in our school laws, providing for a school superintendent in each Congressional District; and for a more efficient system for the examination of teachers, and for granting graded certificates.

He proceeded to remark that he was a native of the State; could remember its history from its admission into the Union, and was familiar with its laws upon the subject of education. The

laws were better defined now than heretofore. The object of education is National; it is the interest of Indiana to provide that her resources shall be developed. She has wealth in her soil—upon her soil. In order that commerce shall have its proper share, her arts and sciences must be developed; at their foundation lies the prosperity of our State. It is to the interest of our State that we have a system of common schools—a system social in its character. It is the interest of Indiana to have a comfortable, a social, a happy people. It is her interest to attract here people, seeking homes. All science is circumscribed in its latitude, and the line is the Bible. It is therefore the interest of Indiana to see to it, that a deep religious influence shall be infused into all her intellectual institutions.

Education then, for the greatness and happiness of this State, is a noble work; we should strive for the accomplishment of those objects which aim directly at the prosperity of this State. We now, by law, have one State Superintendent, whose duty it is to go to every county and instruct the people of the State. This is more than one man can do.

The State must send out its men among the people; we must begin there; it was so with Ohio, when she started in the work of education. He remembered the pleading eloquence of that great man, Samuel Lewis, when he sought to arouse the popular mind. In the East they had now come down to having a Superintendent in each county, and in some, one in each town in the State. Who would suspect that the people of Massachusetts, Connecticut, Maine, and New Hampshire did not understand economy? They have learned that this is the truest kind of economy. Get the right men, put them in the right place, set them at this employment, and then the work will go on safely, surely, and economically.

He had no idea that much could be done in the way of education, till they had got the people roused up. New Hampshire gave a very apt illustration of the operations of capitalists to counteract the effort to support schools by a tax. We wanted the State Superintendents to go out and expose these sophistries, and we should find a vote strong, full, and decided on the subject. The poor man's children can rejoice at the benefits of the education provided for them. Let us show our State that she must secure her rights, by telling her people what these rights are.

Something had been said on the subject of Normal Schools. You must have school teachers who know what they are at. We

must have a new order of teachers; we must develop that mind which constitutes living teachers. No teacher can be called successful till he can touch the heart. Here are the elements of the Normal School. Mr. Hobbs's remarks were very animated, and what was more, they were all to the point.

Mr. Bird said there were too many officers in the State; they absorbed the school money; the District Superintendent would require \$500 a year, which would, in the aggregate, amount to too high a sum. If we were rid of debt and our taxes were not so high, we might have all the officers, Mr. H. desired. He moved that the section relating to District Superintendents be stricken out.

Mr. Phelps said Mr. Hobbs wanted to have a new set of officers, which would increase the taxes. He therefore supposed that this expedient would fail. He proposed that the teachers should lecture.

Mr. Stevens said that few teachers could lecture; he and others had not the *copia ver-bore-'em*. (Laughter.)

The motion was laid on the table, and the Association adjourned till morning.

WEDNESDAY MORNING, 9 o'clock.

The Association re-convened; prayer by G. A. Chase.

The Standing Committee reported in favor of holding the next meeting at Richmond, August 11th.

A resolution was adopted, ordering 1,000 copies of the memorial to the Legislature.

The Committee on Nominations reported the following:

President.—James G. May, New Albany.

Vice Presidents.—W. D. Henkle, E. O. Hovey, S. A. Lattimore, Prof. E. C. Bishop, R. Chapman, S. R. Adams, J. A. McLane.

Executive Committee.—J. Hurty, A. J. Vawter, R. A. Estis, B. C. Hobbs, Charles N. Todd, G. B. Stone, G. A. Chase.

Treasurer.—S. T. Bowen.

Recording Secretary.—E. P. Cole.

Corresponding Secretary.—M. Charles.

Report accepted, and 2 P. M. set apart to consider and act upon the same.

Mr. Hurty reported the following Board of Editors:

Resident Editor.—Geo. B. Stone.

Associate Editors.—W. D. Henkle, E. P. Cole, Geo. A. Chase, Miss M. F. Wells, Miss M. J. Chamberlain, Miss Cynthia M. Bishop, R. M. Johnson, R. B. Abbott.

The report accepted, and the Editors nominated, chosen accordingly.

The subject of a memorial to the Legislature on the subject of a Normal School, and the creation of Congressional District School Superintendents, was taken up.

Mr. May said he was in favor of a State Normal School, but this was not the time. Again, the class of Superintendents could not be had at the price, and they would not meet the purpose. They would cost three times the sum proposed. The teaching was not well done. He thought that the getting up of a good township school of a higher grade in each town, would, at a less expense, do infinitely more for the education of good qualified teachers than could be obtained by all the Normal Schools proposed. In Boston, New York City, St. Louis, and other cities, they educated more and better teachers than the Normal Schools. St. Louis is preparing every year a class of her own citizens for teaching in her own schools. He would like it if the Committee would take this suggestion, and consider the feasibility of providing Normal Education in Central schools.

Prof. Wilder, of New York, was invited to speak. He declared the Normal School at Albany to possess a class of teachers equal if not superior to any in the Union. The difficulty was with its expense; it cost \$10,000 a year, a fact which Demos with his hundred hands and no head, was inclined to consider as costing more than the benefit received. About 800 teachers had been graduated, of whom not one-half were teaching in the State. They needed a police at the terminus of each railroad, to confine within the State every Normal Graduate, till the State had received the benefit of his or her labor. He saw before him some of the best pupils of that school, come here for better compensation; he did not blame them, but the State did not wish to educate teachers for the "rest of mankind." The location of the school operated prejudicially to its popularity. It was in Albany, where expenses of living were too high for the country pupils to afford. The severe drill of necessity required, and the structure of the building, so impaired the health of many of the pupils, that the injury to health often more than overbalanced the benefit of the education.

The prejudice against it outside of educational circles was quite strong. The teachers did not desire it. He attributed it to the peculiar utilitarianism of the people, who wanted dollar for dollar, and more. They needed the institution more popularized and less metropolitan, to counteract this prejudice. It now was at Albany, and that city, year by year, furnished pupils at the expense of the State, to supply all vacancies in the number of scholars; yet if it could be placed in the country, and more schools created of a similar character, this prejudice might yet vanish. Indiana would have the same experience, if she pursued the same course; they would avoid these difficulties if they would establish a plurality of schools, having the staff of teachers at work for one or two terms in their departments, and employed during the vacations holding Teachers' Institutes, and in other methods making themselves felt in every quarter of the State; so they did in Massachusetts, and that State has made Normal Schools, four in number, more practical than any other State in the Union.

On the subject of Congressional District School Commissioners, he felt differently from those who preceded him. He felt that their influence would be imperceptible. Like what the New Hampshire man said of President Pierce, "Spread out all over the Union, they would be every where very thin." In that case the office would be liable to be abolished by a freak of legislation at any moment.

In New York, under the auspices of John Spencer, the educational police system had been established—a county with a staff of Town Superintendents. Simultaneously sprung up with this office, the Teachers' Institutes, and the State took a great stride in educational progress. In 1847, the Legislature abolished the office; Teachers' Institutes diminished in number. In 1854, the Dep't of Public Instruction was created, and Victor M. Rice elected to fill the post. The new Superintendent directed all his energies to restore the old office and revive Teachers' Institutes. The bill failed through the treachery of a Senator. The next year a new bill, abolishing the office of Town Superintendent, now degenerated in most places to a mere humbug, and providing for the election of School Commissioners, one in each County District, was passed. The salary was \$500, paid from the Treasury of the U. S. Deposit Fund—insufficient, but yet they had succeeded in securing a body of officers, superior to any in the Union. Teachers' Institutes had been held in almost every county in the State. The schoolmaster had been going abroad to the West, but he felt

gratified to say that some had remained. He recapitulated the names of Ranney, Betts, Vosburgh, Reid, and others, and paid a tribute to Miss Tenney, of Binghampton, Mrs. Sheldon and Miss French, of Rochester, and others "of whom the world was not worthy."

In short, he predicted, that with four Normal Schools and a staff of teachers, who should, during vacations, itinerate and hold Institutes, Indiana would in three years forfeit her reputation of having the most ignoramuses of any Northern State.

The subject was now referred to the Executive Committee.

A Committee of three was appointed to meet Hon. Henry Barnard at the cars, and escort him to the Capitol.

Prof. Twining was now announced, and delivered a report, at once highly finished, able, and practical. We hope to see a copy in print. He said that the State Universities of the West—the property of all the people—were thus far little else than local Colleges. A State University should not be primarily a College. He defined the three departments into which Universities should be divided. Agriculture, Astronomy, and Natural History. It should have a large library, and faculties in each department with fixed salaries, subject to increase from tuition of pupils. Local Colleges should have the right to affiliate with the University and receive advantages and privileges therefrom. Their faculties should have free access to the lectures and libraries of the University. The students should have the right to apply for and, on examination, receive any of the degrees of the University. Each College should receive from the University a set of meteorological instruments, on condition that it shall keep a meteorological journal. Prof. T. defined very intimately the connection of the University with the State, and the services to be rendered.

The Board of Trustees should represent at least five religious denominations.

After some incidental discussion, the Association adjourned till afternoon.

AFTERNOON SESSION.

The Association was favored by a report from Mr. Dillon, giving a history of Common Schools in Indiana.

The election of officers being in order, a ballot was had, which resulted in the choice of the candidates already nominated.

The following resolution, on motion of E. P. Cole, was unanimously adopted.

Resolved, That this Association approve of the editorial management and high educational character of the American Journal of Education and College Review, edited by Abraham Peters, and that we recommend it to the patronage of the teachers and friends of education in Indiana.

The report of the Treasurer was now read and approved.

Geo. B. Stone, resident editor of the *School Journal*, reported upon the financial condition of its affairs.

On motion of Mr. Stevens, the time to be occupied in addresses was restricted to 45 minutes.

The subject of appointing a State Agent was then considered. Several persons proposed expedients to compensate the Agent. A tax of one per cent. on salaries was proposed.

Mr. Chase thought the *easy* time had passed; the *School Journal* had now to pass through its hard time.

Mr. Hobbs thought a teacher in each county acting as Agent, would be more influential than a State official. Mr. Morton concurred with this sentiment.

Mr. Bower moved a recess of ten minutes. Carried.

Upon calling to order, the State Agency question was called up. Prof. Wilder was called for. He remarked that it had been said that if every teacher did his duty there would be no need of a State Agent. Granted. He would also affirm that if every parent in Indiana could be equally competent and faithful, there would be no need of the Schoolmaster. What was every body's business was no body's business. What he knew about State Agents was principally from observation, but it was decidedly in favor. The experiment had not been well tried in New York, but it had succeeded quite well, all things considered. In Ohio, the office had about superseded the necessity of a State Superintendent. In Illinois, they had had two or more Agents, and they had placed the position of the teachers ahead of the educational interest in the West. In Indiana, their *School Journal*—this first year of its history—had sustained itself and had money in hand. With a good State Agent it could be increased to a circulation of 4,000. Teachers' Institutes would become more valuable and interesting, and the teachers of the Hoosier State be awarded a higher professional position. It was the way to begin aright. It was the thing necessary.

Prof. D. Wilkins, of Illinois, was next called for. He was highly gratified, he said, with the privilege of meeting with the teachers of the Hoosier State. He had been much pleased with the sessions of the Association up to this time. But of all subjects discussed, the one before the Convention was of the most importance. Fellow teachers, your work must not be a local one. In all your actions, the interests of the entire State demand your consideration. Have you not an Egypt here, sir, as well as the State of Illinois?

Voices—Yes, yes.

Prof. Wilkins resumed. The gentleman upon his left has remarked that you can circulate your *Journal* by lectures given by teachers in their respective districts. But, sir, if Southern Indiana is like Southern Illinois, you must have many districts in which teachers are not to be found capable of lecturing upon any subject connected with the profession. Not, sir, because of any neglect upon the part of the teachers there, but because they have not had the privilege of receiving the qualifications for their calling. You will find, no doubt, sir, as much natural talent and ability there as in any portion of our country. Only call forth their latent energies, which have long been buried, and the great work assigned you as teachers will soon be accomplished.

The question then arises—How can it be done? Here, sir, you see the absolute necessity of having an Agent in the field. It has been asked—How can he be supported? The teachers in Illinois have answered, by putting their hands into their pockets and advancing the means. Some have even paid from \$150 to \$350 in carrying out their educational movements. They not only had their Agents in the field, but the Board of Education, representing the nine Congressional Districts of the State, at their own expense have traveled through our State and held Congressional Institutes. And, sir, what has been the result? Instead of having eighty or a hundred and fifty at the State Teachers' Institute, they had at the last session in Chicago from five to six hundred delegates. Throw your arms then around your *Journal*. Place it in the hands of every teacher and friend of education in the counties represented. But how, sir, will you place it in the hands of the teachers in that vast majority of counties which are not represented here? There is no other way but to put your hands into your pockets, raise the salary of an efficient Agent, send him forth with a cheerful heart, and let him carry your *Journal* into every nook and corner

of your State, and the work will soon be consummated. Let him go, sir, feeling that the heart of this Association goes with him. Let him visit the schools—the family circles; let him tell the story of the existence of your Association; let him hold Institutes; let him exhibit your *Journal* as its organ; and ere long there will be no Southern nor Northern Indiana, but the blessings of an equal education will be conferred on the entire people. In conclusion, let me say, sir, make the trial. Send forth your Agent into the field; and no doubt, sir, the ameliorating influence exerted will tell not only for the present but in all future time.

Mr. Kent explained. The proposed County Agency was to assist, not to supersede the State Agent. He spoke at some length, approving the previous remarks, and declaring that what he wanted was to render what they attempted more effective.

Mr. Wilson said that his friend Wilder, from New York, had anticipated his remarks. He believed that a State Agency was the thing absolutely necessary to forward the cause. The majority of the teachers in many of the counties did not yet know of the existence of a State Teachers' Association. He did not think that such teachers would do much to advance the cause, or the success of the *Journal*. Mr. W.'s remarks were quite pertinent.

Mr. Lawrence said that the increased circulation of the paper would attract advertisements from publishers. In reply to a question from Mr. Wilder, he replied that the employment of a State Agent would attract patronage to the *School Journal*, enough or nearly so to pay the Agent. He continued his remarks with much pointedness.

Subscriptions for the support of an Agent were then received.

While this subject was pending, the Association adjourned till evening.

EVENING SESSION.

The Association re-convened at 7 o'clock, P. M.

Pledges for the *School Journal* were received.

Prof. Mills, Superintendent of Public Instruction, called attention to the subject of Township Libraries, and requested teachers to forward to him information as to their condition.

The President elect, Prof. May, was now introduced to the audience. He returned thanks for the honor conferred upon him, and though unworthy, promised his best efforts to serve faithfully the

interests of the Association. In relation to the policy of future meetings, he recommended that reports and addresses generally be reduced to an average length of fifteen minutes.

x Prof. White, of Wabash College, was next introduced, and delivered an address upon the subject of Religion and Education. It was an able, learned, and talented production, to which a mere abstract cannot do justice. He eulogized popular education, and demonstrated conclusively that it furthered true religion. Ignorance lay at the root of irreligion. Universal education was next in value to universal religion.

A vote of thanks was carried.

A vote of thanks was also tendered the citizens of Indianapolis for their hospitality and free entertainment; also to Railroad Companies for return passes to members.

Messrs. A. Wilder, D. Wilkins, A. D. Fillmore, and E. Longley, were elected honorary members.

Resolved, That the editor of the American Journal and College Review, be requested to publish Prof. Twining's address delivered before this Association.

It was further ordered that a Committee of three be appointed to audit the financial accounts rendered before the Association.

The Executive Committee were instructed to use all means in their power to augment the funds required for the support of a State Agent.

The acting President now tendered his thanks to the Association for their indulgence, pronouncing it an unenviable situation to *accidentally* act as President. He had never seen a more orderly body.

The meeting then adjourned to meet at Richmond, August 11th.

Further reports of the lectures and discussions of the Association will be given in the February number.—Ed.

THE VOYAGE OF LIFE.

Gennie came, and climbed into my lap at sunset. "Cousin," said she, "will you talk to me? It is so dark you can not sew." "Yes, dear; about what?" I answered, smoothing the sunny tresses of her hair. "O, anything; tell me about that picture you were drawing to-day, with the river, and the many boats in the distance, and the great ocean, with one little boat almost upon it,

and the child who guides it." So I took the sketch from my portfolio, and gave it to her, that she might see it more plainly, for the room was growing dark.

There is a great country, dear, said I, through which that river flows, very varied, and beautiful to see—and the stream, from a tiny rill, swells and deepens, flows darker and stronger, until at last it sweeps into the vast ocean. And all the myriads of people who are born into this land, embark upon this stream, and sail upon it all their days—till the current bears them out into the gray, mysterious sea, and they are seen of men no more. And though all these voyagers must embark at the same spot, and must sail on till they reach the same goal—yet some are only days upon the road, and some a *few* years, and some *scores*, and to no two has the voyage been the same, or the changes that they met, alike. And all at first are clothed in robes of spotless white, beautiful to behold, and their faces wear the light of innocence. But as they mingle together, and one beholdeth that his neighbor hath a costlier shallop, or a softer cushion than himself, the leaven of selfishness worketh in his heart, and he saith: What is he better than I, that these things should be given to him, and I left destitute? Then Envy, and Malice, and Evil-speaking, whisper to him—and as he bendeth his ear to their counsels, they touch with their foul hands his snow-white garments, and lo, they are stained and blackened, and the fair face becomes distorted and fierce.

Some few there be, who will not listen to these voices, but who, with eye and heart single, look forward to the end as to a festal day, and, with patience having overcome the dangers and difficulties of the way, lie down at night in quiet sleep, and glide gently out upon the mighty ocean.

These bear still the look of innocence, and their garments glimmer through the dusky shades.

There are yet other some, who hearkened to the whispers of the tempters, and whose robes were tarnished for a season, who yet grieved for the wrong they had committed, and wept bitterly—promising not again to err—and these tears fell down upon the stains, and they were washed away, and their faces grew more beautiful than the innocents, for they had overcome trials—and every repentant tear sparkled like a precious jewel, and shed light about them.

The child alone, has almost launched her barque, you see, upon the boundless ocean, and the light that burns so brightly on its prow, has been her guiding star.

While hands were lifted from the stream to stay her course, soft voices sang in her ears, entreating her to turn back, but she gave no heed, for the light in the bow was her guide, and she wavered not an inch.

Then dark tempests burst upon her, and the crashing thunder deafened her, and the lightning glared horribly about her little boat, but still the light in the prow shone steadily, and still by it she steered her tiny shallop. She has passed the whirling rapids, and the black rocks, and the foaming whirlpool, and is almost at her journey's end; and behold her face shines with a glory like the angels, for the radiance thrown upon her by the light she has followed, is celestial. Upon her knees, with clasped hands, and face raised heavenward, she passes from our view, but we know, Genie, do we not, whither she goeth?

"You mean, cousin, that the stream is *Life*, and the ocean is *Eternity*, and the light upon the prow is *Truth*. You mean to teach me to be like the little pilgrim. I will not forget. And now, cousin, dear, just one song, if you please, and then I won't trouble you any more." So I laid the sunny head down on my breast, and sang her the words that came to me in the twilight:

Little Maid, with tender eye,
That no tear-drop ever wet,
Blushing cheek, and forehead high,
Where pale thought her signet set,
Whither speed thy tripping feet,
Never weary—ever fleet?

Stretched before thee, I behold
Pathways twain from which to choose!
O, let not the wavering feet
Seek the wrong—the right refuse.
One is fair, and easy trod,
But the other—leads to God.

And the first by meadows green,
And blue waters, takes its way.
Clouds dim not the sky serene,
And the travelers there are gay.
Yet, my little maid, beware,
Only poisoned fruits grow there.

The broad road leads unto death;
From the streams and meadows rise
Poison vapors—noisome airs,
And who breathes them, surely dies!
Thus the crowd of travelers gay,
Surely, surely, fades away.

Rough the other path, and straight;
 Sharp stones bruise the little feet,
 That essay to reach the gate,
 Opening on the golden street.
 Steep the hills, and dark the way,
 Yet it leads to endless day.

And though hard the task, for thee,
 Be not hopeless, little one;
 "As thy day, thy strength shall be,"
 Till the weary journey's done;
 He will bid thee "welcome home,"
 Who bade little children come.

Such the paths I dimly see.
 Little maiden, choose thy way,
 Downward to the endless dark—
 Upward to the perfect day.
 There He 's waiting for His child,
 Who hath kept her undefiled.

"Do you like that, Genie?" said I, looking down into her face. But she laid very still in my arms, and leaning over, I saw that the white lids were closed, and my little pet asleep; so I laid her down gently, and thanked God reverently for the blessing of "little children."
 NORA.

CORAL CREATIONS.

BY MARY ELIZABETH.

"The work of creation is as much going on now, as when the first lichen was placed upon the earth's naked rock, or as in the age of reptiles." But who would suppose that the animal kingdom would be called upon to contribute its aid? Yet it is so. He who makes the winds his messengers and the lightnings his servants, employs the humblest insects in building up the vast domains upon the earth's surface. Difficult, indeed, is it for the human mind to embrace or unravel the mysteries of creation, to perceive dead matter assuming the forms of life in the visible universe, clothing it with beauty and grandeur.

Perhaps every one has heard that the coral, a species of polypus, exists in the ocean-bed, and produces reefs which eventually become islands covered with earth and luxuriant vegetation. But the method by which this work is accomplished is not generally known. It is said to be done by building, but this gives only an

indefinite idea of the process. We may as well say that the snail and oyster built their shells. Nature's storehouse furnished the elementary calcareous material in some form, and the animal, by simply fulfilling the laws of its organization, gave it the figure in which it subsequently appeared.

The coral animal is of a soft, doughy texture, secreting in every part of its body the carbonate of lime, thus forming a skeleton of solid frame-work. We never find one alone, but a whole community, each rooted in its parent's body as one branch is rooted in another, or in the trunk of a tree, all uniting to constitute one body or mass. Although one generation may die, its posterity do not perish with it, but continue to grow, to shoot out new offspring, till their time of dissolution comes. Then the soft parts of their body decay, leaving the skeletons, a wall of hardened calcareous stone. Mountain limestone is evidently of marine origin, as the testacea inclosed in it bear witness. The coral races are not the only contributors to the seformations, but sea-crabs, oysters, and other shell-fish add their remains to facilitate the work. When a long series of years has passed, this limestone mass, for such it is, all dead mineral below, but full of life upon its external surface, emerges above the water. Then the waves pile sand and drift-wood upon it, sea-birds and turtles take up their residence there, plants begin to vegetate, and we have a little islet constantly growing, and becoming eventually fitted for the habitation of man.

Myriads of these productions are found in the Pacific, rivaling in variety and brilliancy the most beautiful gems adorning a coronet. The Great Barrier Reef, a coral or calcareous formation, extends a thousand miles in length, and thirty in average width, filling up the whole space between Australia and the Bristow Island. A portion of Wales on the south, passing into Ireland, some portion of Scotland, and the middle, northern, and south-western districts of England, were once the coral reefs of an ocean. The peninsula of Florida is constantly extending itself by the operation just described. Other parts of the continent are doubtless increasing in the same manner. The bed of the Mississippi is of solid limestone, a coral formation. So are many other river beds on this continent.

The forms of the coral reefs are beautifully variegated. Sometimes they have that of trees or flower-tops, and often are hemispherical. Seen from a distance, they resemble painted highlands, and sparkle like silver, interblended with the hues of the rainbow.

They arise from unfathomable depths in the ocean. This involves a new problem. It has been ascertained satisfactorily, that the coral animals can not exist at a much lower point than 125 feet below the surface. They seem to require a certain amount of heat and light, and to thrive best when they are exposed to the surfs. How is it, then, that the line has been cast down two thousand feet without reaching the ocean-bottom, whence these reefs originate? It is probable that the bed of the Pacific Ocean has been gradually sinking down in many places. The process must

have been so slow, that the coral growth could envelop it, and form reefs over the surface. The sinking being imperceptible, would enable this to keep pace with it till hundreds and thousands of years having passed by, the original earth was thus magnificently buried in a mausoleum outrivaling those of monarchs and powerful men. The slab of coral rock alone remains to mark the spot.

There are islands even now in the Pacific, retiring out of view. Some are fringed with these formations; others are surrounded by a rocky ring, marking the former boundary, while between it and the present beach the sea flows in; in others you find only the coral reefs, circular or oval, many miles in diameter perhaps, with a lakelet inside, often dotted with miniature islets. In many of the Polynesian islands, not a stone or rock exists which is not coral. A quartz formation, so common among us, is a treasure there; and pebbles are reserved as the property of kings.

France evidently was a similar creation. Its soil, based upon limestone, certainly favors the opinion. Other parts of the continent may have originated in a similar manner. It is by no means a visionary supposition. That spot which was once the abode of the mermaids and kelpies of the torrents, is now the cloud-capt summit which first catches the sunlight.

It is estimated that the coral deposits amount to six inches each year. The upheaving of the areas under the Pacific Ocean, would set these zoophytes at work still more, and the conclusion is by no means irrational, that we shall yet have one or more continents uprising between America and Asia. But then the ocean might make inroads upon our present world, dividing America in two, and breaking the eastern continent into fragments. Such marvels have occurred. Our mountains are gradually falling to pieces, and descending to fill the valleys. The land of our fathers was once a part of ancient Gaul. London and Paris were once in the same basin of an immense lake or inland sea, fed by rivers flowing from the south, which eventually filled it up with clay. Some similar fate may be awaiting our own fresh waters.

Between Wales and Gaul, (the same name, by the way,) was a beautiful, widely-extended valley, covered with willows and palms, in which the curlews roosted, and the quails made their nests; and under which elephants, mammoths, and other animals long since extinct, were wont to find shelter. Changes, perhaps, akin to those which the coral reefs are effecting, drove the waters of the ocean through this valley, and made of Britain the "Beautiful Island."

It is indeed true that there is nothing insignificant. The coral animals are so small as to be almost invisible, yet are the architects of continents. If we could penetrate the mysteries of human history, we should find the sentiment and belief of a world regenerated by a Galilean carpenter, an empire revolutionized by an obscure thinker, the aspect of a world changed for all time by the movements of persons who can not indeed be forgotten, because they were never known. The imponderable ether in its manifest-

ations as electricity, and the swelling vapor, have already created new habits of action, and even of thought. We, the corals of another era, growing out of each other, elaborating new conditions of existence, have an end to fulfill in the doings of Providence, and no substitute can be found capable of occupying our place. Though humble amid the wonders of the universe, we are by no means unnecessary in the accomplishment of its conditions. While, in the spirit of the evangelic Word, we should esteem others better than ourselves, yet must we remember that we too exist for a purpose, and assume the relations devolving upon us with modesty and discretion, yet with energy and boldness.—*N. Y. Teacher.*

TRUST IN THE LORD.

As a snow-flake hung high in the heavens one day,
It floated down, Earthward, and thus did it say:
"Must I go, must I go, from the Ether so free—
Oh! desolate Earth, must I fall unto thee?"
"Come down," cried the Earth to the tremulous flake,
"And thy beautiful form I'll more beautiful make;
Come down, for the wisdom that formeth us all,
Hath fixed that the fairest and freest must fall."
"Oh! say," said the snow-flake, "if downward I go,
What form shall I take—tell me Earth, dost thou know?
Shall I gleam in the Lily or glow in the Rose,
Or dance where the stream sings a song as it goes?"
"I know not, I know not," the dark Earth replied,
"I know thou must fall, but I know naught beside;
Be trustful and lowly, and seek not to know
Where the wisdom that formed thee, may bid thee to go."
"I will come," sighed the snow-flake in lowliest trust,
"Though I sink in the desert or mingle with dust;
Since the wisdom that formed me and marked out my way,
Still holdeth my life in its wonderful sway."
As the snow-flake lay sinking, dissolving, alone,
Through the fast-flying clouds down the warm sunshine shone,
And it caught up the snow-flake, and to it was given
A place in the rainbow that spanneth the heaven.
"Oh! heed thou this lesson," the snow-flake would say;
"Walk humbly where wisdom shall show thee the way;
Unseeking, unasking the future to know;
Where thy Maker shall send thee, there trustfully go.
And when thou hast learned to be lowly and meek,
Hast ceased thine own honor and glory to seek,
He will send down His angel and make thee His own,
To shine in the rainbow that arches His throne."

M. B. C. SLADE.

MATHEMATICAL DEPARTMENT.

W. D. HENKLE, Editor.

No. 18.

We have received a solution of this problem from R. W. McFarland, which considers the problem in the same light as the one in Emerson's Arithmetic that contains the same numbers, but instead of men mowing it has oxen eating. The result obtained by Prof. McFarland is correct for his understanding of the problem. But it must be remembered that in the Emerson problem, the oxen are supposed to consume all the grass, while in this problem the men only mow over the ground once: that is, they do not go back to mow the stubble. We shall publish a solution of this problem when we think our correspondents have given it sufficient thought.

No. 20.

After sending our solution of this problem, we received solutions from E. M. Stribbling, M. C. Stevens, and R. W. McFarland. When solutions reach us after we have sent our mathematical article, they will be acknowledged in the next. We will also acknowledge any new solution of a problem of which the solution has ever been published in the Journal, and may even publish it if it is of sufficient interest.

No. 21.

One of our correspondents seems not to understand the language of this problem. Let him substitute the word *area* for magnitude and it will be sufficiently clear.

No. 22.

Since sending our solution of this problem, we have received a solution from M. C. Stevens.

PROBLEM No. 28.—BY THE EDITOR.

A father divides his property among his children as follows: the first receives \$100 and $\frac{1}{10}$ of the remainder; the second, \$200 and $\frac{1}{10}$ of the remainder; the third, \$300 and $\frac{1}{10}$ of the remainder. This division gives them an equal amount. Required the number of children and the amount each receives.

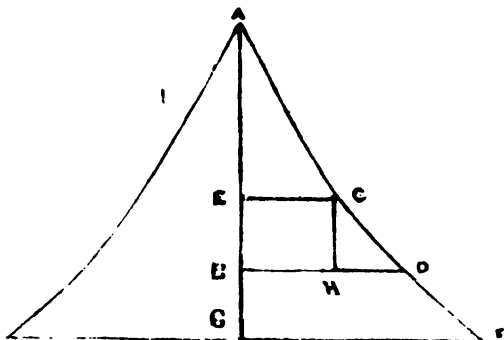
A mental solution is required.

PROBLEM No. 29.—BY O. A. BROWNSON.

Wishing to measure 4 quarts of wine, and having but three cups, one of 8 quarts, one of 5 quarts, and the other 3 quarts capacity, how shall I proceed, the cups being empty.

SOLUTION OF No. 23.—BY THE EDITOR.

This problem is an interesting one, but our correspondents have not as yet done anything for it—at least we have not heard from them in reference to it. We shall endeavor to make our solution so plain that any one who has a moderate knowledge of Calculus may comprehend it:



Let AF represent the required curve, the body commencing to fall from A , and being constrained to move in the curve by the force of gravity alone, the curve being of such a nature that the body approaches the line GF uniformly. Let AG be the axis of abscissas and C any point of the required curve, and put $AE = x$ and $CE = y$. Now a body falling by gravity along the curve AF will have acquired the same velocity at any point C as if it had fallen from A to E . Hence, to find the velocity of a body falling in the curve AF at any point C in that curve, we have only to find the velocity a body would have at the corresponding point E , after having fallen by gravity from A to E . On p. 38 of *Olmsted's large Philosophy*, we find the formula, $V = 2\sqrt{mS}$, in which V represents the velocity a body has acquired after having fallen through the distance S . If then we put x for S we have $2\sqrt{mx}$ for the velocity at E or C . If we suppose CH and DH to be infinitesimals, that is to be dx and dy , the differentials of x and y , we may consider CD to be a straight line equal to $(dx^2 + dy^2)^{\frac{1}{2}}$. Since CD is also an infinitesimal, the velocity of a body while traversing it may be considered as uniform; hence we would have the proportion—the velocity of a body moving uniformly through CD is to the velocity of a body moving uniformly through CH or EB as the distance CE is to the distance CH . Taking the velocity at C as the uniform velocity through CD , and a as the uniform vertical velocity, the proportion becomes

$$2\sqrt{mx} : a :: (dx^2 + dy^2)^{\frac{1}{2}} : dx$$

$$\text{whence, } a dy = dx \sqrt{4mx - a^2}$$

$$\text{Integrating this we get } y = \frac{(4mx - a^2)^{\frac{3}{2}}}{6am} + C$$

When $y=0$ the quantity $4mx-a^2$ becomes nothing, because in this case the point C is the point A, and we have seen that the velocity of any point of the curve is $2\sqrt{mx}$, therefore the velocity at A is $2\sqrt{2mx}$; but the velocity at A is also evidently equal to the uniform vertical velocity a , whence we have $2\sqrt{mx}=a$ or $4mx=a^2$ or $4mx-a^2=0$. Therefore when $y=0$ the constant C is also zero; hence $y=\frac{(4mx-a^2)^{\frac{3}{2}}}{6am}$ is the equation of the required curve and indicates that it is a semi-cubical parabola.

No. 24.

This problem was calculated by T. Charles, R. M. Cameron, R. W. McFarland, and C. Z. Eddy, and constructed by T. Charles and Jacob Staff. T. Charles gets $(2\sqrt{3}-3)R$ for the radius of one of the small circles, R being the radius of the circle whose area is 320 rods.

This was not the problem which Prof. Hoss proposed; we sent it as he proposed it, but the change was made by a misunderstanding, at the office of publication. The following is Prof. Hoss's Problem:—*What is the radius of one of the three equal circles which touch each other externally and inclose an area of 320 rods?*

SOLUTION OF No. 25.—BY HENRI MONDEUX.

He sells the first portion at a profit of 25 per cent., and the last at 175 per cent., and gains 60 per cent. on the whole. The first profit is less than the mean profit by 35 per cent., and the second is greater by 115 per cent.; he has therefore sold 115 parts of the first against 35 of the second; that is, the first portion sold was the $\frac{115}{150}$ of the whole cask, and the last the $\frac{35}{150}$; but the first portion was $\frac{1}{4}$ of the cask and 2 gallons more; and the difference between $\frac{115}{150}$ or $\frac{23}{30}$ and $\frac{1}{4}$ is $\frac{1}{60}$; therefore 2 gallons is $\frac{1}{60}$ of the cask; that is, the cask contains 120 gallons.

[This problem was solved by Judge Clark, Hiram Hadley, T. Coggeshall, M. C. Stevens, J. S. Wilson, Jacob Staff, C. Z. Eddy, O. A. Brownson, R. M. Cameron, S. R. Connor, R. W. McFarland, E. M. Stribbling, and S. P. Lothrop. The solutions of Clark, Staff and S. P. Lothrop did not make use of the first cost, which is not necessary to be considered, as was done in all the other solutions which we have received. The solution of S. P. Lothrop was the same in effect as the one given above. Henri Mondeux, "the Shepherd of Touraine," a youth of remarkable powers of calculation, visited the Isle of Jersey several years ago to exhibit his extraordinary powers of mental calculation. This problem was there proposed to him, and his answer was said to be "nearly instantaneous." By request he wrote out his solution, of which the one above given is a translation.]

PROBLEM No. 30.—BY J. CUNLIFFE.

Given the vertical angle, the difference of the including sides, and the length of a line drawn from the vertical angle to the middle of the base: to construct the triangle.

EDITORIAL MISCELLANY.

THE ANNUAL MEETING.

The meeting of the Association, in point of numbers and enthusiasm, far exceeded our hopes. We were present last year at Madison, and also at the Semi-Annual meeting at Lafayette, and in comparison with these, our gathering this year evinces a deeper interest and hopefulness in regard to educational matters. As several who were also present at previous conventions, remarked to us, "could you ask for more progress in one year." It was also emphatically a meeting of *teachers*; not educational men merely, but those engaged in the School-room. We have often attended educational conventions, where the prominent speakers and actors were persons of other professions, but in the one lately convened at Indianapolis, the school-teacher was the controlling genius. The energy and spirit of the meeting was especially seen in regard to the *Journal* and a State Agency.

At Madison, last year, it was with fear and trembling that we ventured upon what we then thought the doubtful enterprise of sustaining a School Journal. There was much hesitation. Many wished the matter deferred till another year; but our success during the past year united all in the determination not only to *sustain* but to place it on a permanent basis. Pledges to the number of seven hundred and ninety-five copies were volunteered *at the meeting*, and it was decided to have an Agent to canvass the State, holding Teachers' Institutes, delivering lectures, and awakening interest in Education. Pledges to sustain such an Agency were freely made, and this measure, which involves a large expenditure, was carried with less of fear and hesitation than attended the first starting of the *Journal*. There could be no mistaking the will of the convention. We felt that this was a work which the State ought of right to sustain and carry forward, but the universal feeling was, "Let it be done at any rate;" "We *can* do it;" "We *will* do it." Can any sister State boast greater progress than these facts most surely indicate?

When we consider how recent is the establishment of our Free School system, how little hold it has as yet obtained upon the affections of the people, and how feeble are educational influences in many parts of the State, we feel proud of the work which our Association has effected. We have beheld with admiration the disinterested self-sacrifice of the teachers of Ohio, but if we mistake not, we saw manifested in our late meeting, a zeal and earnestness which will ere long do for Indiana what her teachers have done for Ohio; and we call upon all friends of education to second the efforts which the teachers of the State with so much liberality, disinterestedness, and energy are now making. Shall we have your aid? Will you, whose children are to be benefited, stand idly by and give no

assistance in this noble work? We need your aid in sustaining our *Journal* and our State Agent. We need your influence in securing the establishment of Normal Schools and Teachers' Institutes; and in making our schools free at least six months in the year, all over the State.

In regard to the *Journal*, we will only say, that we begin the new year with an edition of 1,500 copies, but we ought to have at least twice this number. Shall we have it? is the question. As resident editor, we will do what we can to make it worthy of patronage and support. We confidently believe that we can make it a much more valuable periodical than it was last year. We shall have a greater amount of educational statistics, for our Agent will visit every portion of the State, and his contributions will be of great value. We entered upon the first volume of the *Journal* with no editorial experience—our acquaintance with the teachers of the State was limited—and we had to encounter more than the usual embarrassments which attend the commencement of such a work.

The Mathematical Department of the *Journal*, in which it stands confessedly in advance of all educational Journals, will continue under the care of its former able editor. Our educational corps has been somewhat revived, and although we regret the loss of some who were able coadjutors during the first year of the *Journal*, we trust the wisdom of the Association has supplied the deficiency in the election of its new members.

DEAR JOURNAL:—Your last appearance left me at Corydon, from which I addressed your numerous readers. From that place I went to Salem, Washington county, on the line of the New Albany and Salem Railroad. This is one of the oldest towns of the State, numbering about fifteen hundred inhabitants, and slowly increasing that amount. It has always enjoyed excellent educational advantages through the means of *private schools*. Jno. I. Morrison, one of the pioneer educators of this State, was for more than twenty-five years connected with an efficient Seminary, and was the successful instructor of a large number from Washington as well as from several of the adjoining counties. Our friend, H. D. Wilson, has at present a fine school, and is building up for himself an excellent and well deserved reputation. He is aided by Mrs. Wilson, Misses Morrow and Hopkins—the latter as music teacher. There is no immediate prospect of the inauguration of the Graded System in this place, the majority of the people being averse to the enterprise. It is a singular and suggestive fact, that several of the *wealthy citizens*, who have no children to enjoy the advantages of such a school, are very anxious to have it established, while those who would have to bear but a very small part of the pecuniary burden, oppose it. Such are some of the inconsistencies and perversities of human nature.

I renewed my acquaintance with friend Abraham Trueblood, Principal of the Blue River Seminary, an institution which has for nearly a quarter of a century been under the care of the Society of Friends, and has been instrumental in creating an educational spirit, and at the same time fur-

nishing a large number of well trained scholars and teachers for that region. Friend Trueblood furnished me with a horse, and rode with me over one entire township; and through his aid I procured for our Journal the names of all the teachers, and of several friends of education besides. He is an earnest educator, and is very far from disparaging his name.

Subjoined I give the statistics of Washington county for the last year :

General School-Tax levied, - - - - -	\$5,528
Tax for School-Houses, - - - - -	2,384
Cost of Criminal Jurisprudence, - - - - -	5,069
Population, (Census of 1850,) - - - - -	15,269
Number above 20 who can neither read nor write, - - - - -	1,222

From Salem I went to Bedford, the county seat of Lawrence county. This is a flourishing town of some two thousand inhabitants, situated on the same Railroad as Salem. There is here, too, quite a lack of the proper educational spirit. Like their sister, Salem, they have no school-houses worthy the name. There are two high schools in operation—one under the care of Messrs. Stalker and Voorhis, the other under the supervision of Mr. Connelly, aided by his wife. There are also two other schools of an elementary character taught by ladies. I visited and was pleased with all the schools, and have no doubt but that they are doing a good work. Still their efforts might be made much more efficient by a co-operation on the part of the citizens. Bedford owes it to herself to build immediately a good house, and establish a well-arranged system of free schools. She is abundantly able to do this, and she will be held chargeable for recreancy to duty so long as she neglects this, her true interest.

The following are the statistics of Lawrence county for the last year :

General School-Tax levied, - - - - -	\$4,696
For School-Houses, - - - - -	4,127
Cost of Criminal Jurisprudence, - - - - -	1,800
Population, (Census of 1850,) - - - - -	12,097
Number over 20 who can neither read nor write, - - - - -	1,104

I next visited Putnam County. Its county seat, Greencastle, is a fine town, and the seat of Asbury University, a flourishing and well manned institution under the care of the M. E. Church. There is also here a very flourishing Female Seminary under the charge of Rev. Geo. A. Chase, aided by Miss Newman and other accomplished teachers. I spent half a day in this school, and was highly pleased with all that I saw and heard. If the people of Greencastle consult their own interests, they will see that Mr. Chase is not induced to leave them.

Educational matters in Greencastle, outside of the University and the Female Seminary, are in a languishing condition. The people are under the false impression that the above named institutions can meet all their educational wants. Owing to this error, they have built no school-houses, and from this very want of proper accommodation their children are poorly instructed, the strenuous efforts of competent and earnest teachers to the contrary notwithstanding. There are several energetic and sincere

friends of education in this place, but their efforts appear to be neutralized by the majority, who are opposed to the necessary tax for building and maintaining good *free schools*. Still they send to the University and the Female Seminary. They are liberal, *selfishly so*.

I attended a Teachers' Association in this place, and addressed the citizens during the meeting. There were several addresses made, urging the establishment of Graded Schools, and by none was this measure more earnestly advocated than by Professors Tingley and Bragdon of the University, and Mr. Chase of the Female Seminary.

It is difficult to speak the whole truth about Putnam county without seeming unjustly severe. One of her prominent citizens remarked that "Putnam county built neither bridges nor school-houses." Yet in her agricultural development she stands confessedly high, and one year since she contended with "old Wayne" for the title of "the banner agricultural county." It is much to be regretted, that she does not strive to emulate "old Wayne" in her noble educational enterprise. This would be much more praiseworthy than a race for distinction in raising short horned Durhams, Berkshires, and South Downs.

I succeeded in procuring several names among the citizens, for our *Journal*.

The following are the statistics of Putnam county during the last year:

General School-Tax levied,	- - - - -	\$6,640
For School-Houses,	- - - - -	4,609
Cost of Criminal Jurisprudence,	- - - - -	1,200
Population, (Census of 1850,)	- - - - -	18,615
Number over 21 who can neither read nor write,	- - -	2,021

Truly, Yours,

E. P. C.

NEWBURGH, Ind.

MR. EDITOR: *Dear Sir*—I see Mr. Cole, in his Editorial Miscellany, has marked our town, Newburgh, "very near zero" in educational matters. It is very true there has been but little done here during the last two years in this respect, but we think now the next two years will tell a very different story.

Our Academy, styled Delany Academy, has a brick building two stories high, and situated in a beautiful grove a little from the main body of the town, in preparation, and we will occupy it in a few weeks. The school is in a prosperous condition. We have now a tax laid for building public school-houses, and next season we expect to supply ourselves with school-rooms for our common schools. We have a healthy location, an active community, and we think nothing can prevent us from being an enlightened people. I am well pleased with the *School Journal*, and I think I can get subscribers for it before a great while.

Yours, truly,

G. S. HOWARD.

EDUCATIONAL MEETINGS—The Tippecanoe County Teachers' Association met at the Central School-House in Lafayette, on Saturday, November 29. The Secretary of the Association, Mr. L. L. Kilborn, in his minutes of the meeting, says: "We regret to record the absence of every female teacher in the city, fifteen or twenty in number, with the single exception of one, Miss Mary Vawter." We have not room for the minutes of the Association, or for the report on the importance of County Associations, by E. W. Kinman, but would suggest to our Tippecanoe friends that unless they can secure the attendance of their female teachers, all their lectures and reports will be useless. We hope that the Misses Semans, Pettit, Hathaway, Terrill, Moore, Merrill, and others who favored us with their company at the Annual meeting here in Indianapolis, will take pity on the poor swains who met at Lafayette on the 29th of November, and make their next meeting which comes on the 10th ult., a more cheerful and profitable one.

We learn that Henry County has also organized an Association. Here the ladies were better represented than at Tippecanoe, and we are glad to see that the teachers of this county recognize "Women's Rights," for among the names of the officers is that of Miss Anna Holloway as one of the Vice Presidents. The Association meets next time at Newcastle, on the third Saturday of January, at 10 o'clock, A. M. Henry County gave us but *four* subscribers for the *Journal* last year. It stands pledged for thirty this year. Judging from the list of names of those attending the Association, it can do even better than this. We shall look for a hearty support from the teachers of Henry County.

The teachers of Laporte City have organized a Teachers' Institute, and met for the first time on the 8th ult. Methods of teaching the various branches of study were discussed, reports read, &c. F. P. Cummins, Pres't of the Institute.

TYPGRAPHICAL ERRORS.—A Glasgow publishing house attempted to publish a work that should be a perfect specimen of typographical accuracy. After having been carefully read by six experienced proof readers, it was posted up in the hall of the University, and a reward of fifty pounds offered to any one who should detect an error. Each page remained two weeks in this place, and yet, when the work was issued, several errors were discovered, one of which was in the first line of the first page.

THE Board of Education of New York City, ask for educational purposes for the coming year, eleven hundred thousand dollars, of which four hundred and ninety thousand dollars are for Teachers' salaries.

WE are indebted to Mr. Wilder, one of the editors of the *College Review*, (than which no better educational periodical is published,) for the report of the proceedings of our Association. One fact speaks well for the intelligence of our teachers. Mr. Wilder obtained a larger list of subscribers, for the *College Review*, here, than he did at Chicago, although their meeting was more than twice as large as ours.

THE ILLINOIS STATE TEACHERS' INSTITUTE.

This Association convened at Chicago, Tuesday morning, Dec. 23, and was called to order by the President, Prof. C. E. Hovey, Resident Editor of the *Illinois Teacher*. About six hundred teachers were in attendance. A large number of essays was read, none of them occupying more than fifteen minutes in rehearsal, such being the regulation in such cases. The subject of a State Normal School was considered, and arrangements were made to memorialize the Legislature on the subject. They have teachers of the right stamp in that State. The sessions were deeply interesting, and everybody enjoyed them to the utmost.

Simeon Wright, of Lee County, one of the most able and popular educational men of Illinois, was elected to the Presidency of the Association. Prof. Hovey was re-elected to the editorship of the *Illinois Teacher*; and a staff of editors, six gentlemen and six ladies: J. F. Eberhart, of Dixon; P. Atkinson, of Bloomington; E. L. Wilcox, of Galesburgh; J. Moore, of Chicago; W. S. Post, of Jonesboro'; W. S. Pope, of Mount Morris; Miss Emily McClave, of Coloma; Miss Weaver, of Quincy; Miss Shields, of Chicago; Miss Sell, of Rockford; Miss L. M. Morgan, of Paris; Miss Mary A. Safford, of Shawnee town. Although Mr. Hovey had suffered from a fire, a not unusual occurrence with that periodical, a general disposition prevailed to start him anew. On Wednesday night 750 pledges were given him for the next volume, afterwards increased to near a thousand. So one of our band will luxuriate in editorial clover—fortunate for a good looking man.

The people of Chicago lionized the Association most admirably. The citizens freely opened their doors to delegates; also the Tremont House, Briggs House, Lake House, Shannon House, received 12 guests each; and the Richmond House, Massasoit, New York, Metropolitan, Matteson, May, Cleveland, Garden City, Gage, Revere, and Clarendon, also received guests gratuitously. H. D. Stratton, of Bryant and Stratton's Mercantile College, received and entertained a large number of delegates at his own expense, at several hotels.

On the evening of the 25th, there was a Banquet given by the Teachers of Chicago to the Association, at the Tremont House. The entertainment was magnificent. Wm. H. Wells, Superintendent of the Chicago Schools, presided, and enlivened the festival by brilliant repartee and some glowing speeches. Toasts were in order, and the teachers, the "old fashioned schoolmasters, school marmes," school heroes and spelling schools, etc., etc., were all duly drank and responded to. Our cotemporary, Hovey, was toasted as "a harp of a thousand strings," in allusion to his multifarious duties; the President elect was declared to be all (W) right; the *Illinois Teacher* was celebrated; the Press were noticed, and *Young America*. "Everybody" pronounces the affair the most superb in which teachers ever figured; and our Illinois friends are in ecstasies at the result. They feel now that their State is ahead of the Union.

The great prosperity of educational matters in Illinois is principally to be attributed to the zeal and labor of the friends of education. Wright, Wilkins, and several others gave themselves heroically to the work; Institutes were held, the people aroused, the Illinois *Teacher* circulated. With such effort, such enthusiasm, prosperity was a matter of course; it was zeal truly, zeal with knowledge. We are gratified at their success. We shall emulate it. With our *School Journal*, an efficient State Agency, a body of teachers that we may put against the world, we give our neighbors notice that here in Indiana, the locomotive of progress is unharnessed, the steam is on, the track clear—we are coming.

A. W.

COMMERCIAL COLLEGES, CHICAGO.

MR. EDITOR:—The day subsequent to the closing of the State Teachers' Institute, held in Chicago, 23d, 24th, and 25th Dec., in company with friends Wilder and Wentworth, I visited Bryant and Stratton's Mercantile and Bell's Commercial Colleges. These Colleges are accomplishing a great work for the North-west. We need young men thoroughly prepared to engage in commercial business, and no one can visit these schools without being impressed with the thoroughness, good order, and gentlemanly manner exhibited by both pupils and teachers. The arrangements are such that no scholar can receive his diploma until he is thoroughly raised in all the branches taught. Bell's Commercial College is under the supervision of Thomas P. Sloan; it is in a prosperous condition, and is the oldest institution of the kind in the West. The number of pupils in attendance is 200. Bryant & Stratton's Institution is under the direct supervision of Mr. H. D. Stratton. It has been in operation only about three months, and already numbers 80. Mr. Stratton appears to understand well his business. He and Mr. Bryant have three other Institutions of the kind, located in Buffalo, Albany, and Cleveland; number of pupils in all 400. The time was, when our young men could have some excuse for not being qualified to engage in the commercial business of the age, but now no excuse can be given; here are the schools with efficient and well qualified instructors. Let young men wishing to prepare themselves for business, place themselves under their tuition, and avail themselves of the privileges extended so cordially to them.

D. W.

INDIANAPOLIS, January 1, 1857.

MR. PHILBRICK, Commissioner of Schools for the State of Connecticut, has received the appointment of Superintendent of the Schools of Boston, to supply the vacancy caused by the resignation of Mr. Bishop, who has filled the office for the past six years.

Rev. Mr. Eddy, of Indianapolis, has been elected to the editorship of the North Western Christian Advocate, at Chicago. Rev. J. A. Beawick takes the place of Rev. John W. Locke as President of Brookville College.

From a correspondent of the Tribune we learn that the Swedish School system is in vigorous and successful operation. Eight years ago an ordinance was passed by Parliament establishing schools in every parish. Owing, however, to the scattered condition of their population, in addition to the established schools, very many of the parishes have circulating schools which move from point to point and are taught in private houses.

Mr. Siljstrom, of Stockholm, is at the head of this movement, and it is said that he has done more for education than all the Committees on Education and the Parliament for the last quarter of a century. He is now seeking to form Parish Libraries all over the kingdom.

The school buildings in the City of Stockholm are equal to the best in the country, with large, well lighted and ventilated rooms and improved seats. The school-houses in the country are generally the dwelling houses of the teachers, and also have suitable accommodations. The great defect is the poor pay of the teachers, some in the country not earning \$25 a year beyond their board. This is collected by taxes, laid by the town meetings of the peasants.

Gymnastic exercises form a regular and universal feature of the school system. Each school building has its large, high room with earthen or matted floor, and all sorts of implements for developing the muscles.

Scholars are not allowed to exercise as they please, but there is a regular scientifically arranged system.

Another superiority of the Swedish system, consists in its scientific schools for workmen. In order to accommodate this class, these schools are taught in the evening, and they exist all through Norway and Sweden; and the result is that you find there, among laborers and mechanics generally, an artistic taste and an originality of design, to which our laborers, as a class, are strangers.

We call attention to our advertisements. Among those will be found:

Cornell's Series of Geographies, published by the Appletons. McNally's Series, by Barnes & Co. Of Readers, there is Sanders's Series, by Ivison & Phinney, which has received the official sanction of Wisconsin; also Sargent's Series, by Phillips & Sampson, which is universally popular.

Merriam advertises his New Edition of Webster's Dictionary, one which meets the wants of all classes. Ernst, of Cincinnati, and Anderson & Barr, of Toledo, advertise Robinson's Mathematical Works. Pelton's Outline Maps and Lippincott's Gazetteer, which ought to be in every school, are advertised by Rolfe, of Cincinnati. Warren's New Physical Geography, by Cowperthwait, which has already been extensively introduced all over the country. Longley Brothers call attention to a New Pronouncing Dictionary of Geographical and Personal Names; Morton & Griswold, to their New Common School Speaker; Crosby & Nichols, to Payson & Dutton's Series of Writing Books; Ross, of Boston, and Kelsall, of Cincinnati, to their School Furniture; and the Holbrook School Apparatus Co., to their set of Apparatus, which we hope all teachers will carefully look at, for we believe they will find what they need for their schools. The card of the Fairfield Academy, and of Stewart & Bowen, of our city, with that of Mr. Fillmore and Mr. Sherman, will also be found in our columns.

Rev. Anson Smyth, having been elected State Superintendent of Schools in Ohio, has resigned the editorship of the Ohio Journal of Education. What disposition will be made of the Journal we are not informed. Mr. Smyth recommends that a course similar to that pursued in New York be adopted. In that State the "Teacher" was sold to Mr. Cruikshank for a period of three years.

The number of subscribers to the *Journal* last year was 797, distributed as follows:

Tipton County	-	-	0	Kosciusko	-	-	3
De Kalb	-	-	0	Morgan	-	-	3
Pike	-	-	0	Marshall	-	-	3
Dubois	-	-	0	Randolph	-	-	3
Orange	-	-	0	Decatur	-	-	4
Jennings	-	-	0	Rush	-	-	4
Clay	-	-	0	Henry	-	-	4
Franklin	-	-	0	Scott	-	-	4
Bartholomew	-	-	0	Johnson	-	-	4
Brown	-	-	0	Daviess	-	-	4
Steuken	-	-	0	Shelby	-	-	4
Stark	-	-	0	Warriek	-	-	5
Whitley	-	-	0	Porter	-	-	6
Fulton	-	-	0	Posey	-	-	6
Pulaski	-	-	0	Hamilton	-	-	6
Wells	-	-	0	Carroll	-	-	6
Adams	-	-	0	Benton	-	-	6
Jay	-	-	0	Warren	-	-	6
Blackford	-	-	0	St. Joseph	-	-	7
Grant	-	-	0	Fayette	-	-	7
Hancock	-	-	0	Vigo	-	-	9
Hendricks	-	-	1	Harrison	-	-	9
Cass	-	-	1	Knox	-	-	10
Clinton	-	-	1	Ohio	-	-	12
Switzerland	-	-	1	Parke	-	-	12
Jackson	-	-	1	Lawrence	-	-	13
Boone	-	-	1	Gibson	-	-	13
Union	-	-	1	Spencer	-	-	14
White	-	-	1	Sullivan	-	-	14
Miami	-	-	1	Washington	-	-	15
Wabash	-	-	1	Monroe	-	-	15
Noble	-	-	1	Dearborn	-	-	16
Jasper	-	-	1	Fountain	-	-	20
Crawford	-	-	1	Perry	-	-	20
Greene	-	-	1	Tippecanoe	-	-	21
Owen	-	-	2	Putnam	-	-	23
Lagrange	-	-	2	Montgomery	-	-	23
Madison	-	-	2	Vermillion	-	-	25
Allen	-	-	2	Floyd	-	-	42
Delaware	-	-	2	Jefferson	-	-	46
Lake	-	-	2	Vanderburg	-	-	56
Clarke	-	-	2	Wayne	-	-	87
Huntington	-	-	2	Marion	-	-	89
Ripley	-	-	2	From other States	-	-	60
Elkhart	-	-	3				
Total	-	-	-				797

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REPORT OF ADDRESSES DELIVERED BEFORE THE
STATE TEACHERS' ASSOCIATION, AT INDIANAPOLIS,
DECEMBER, 1856—BY D. WILDER.

W PROF. BISHOP, OF HANOVER, ON PHONETICS.

Language is the utterance of articulate sounds as expressions of human thought. The gift of reason to the human race derives its value from the gift of speech. In intellect, a man may be angel-bright, in affections, angel-lovely, but he would be alone. Speech is the deliverer of the human soul, leading the mind to freedom, liberty. It derives its permanent value from letters. *Vox volat*; the voice flies; *scripta manet*, the writing remains, speaking for time to come. Language is the incarnation of thought. It is an outgrowth of the human mind; and the relation of outward language to internal thought is that of action and reaction. Macaulay remarks that those nations whose language was Teutonic were Protestant; every nation whose language was from the Latin still remains Catholic.

How shall we best treat the English Language? Our language is the resultant of forces. The Anglo-Saxon is the basis; then the Celtic, French, Norman, Latin, and Greek had been added and enriched its stores. "The schoolmaster is abroad," but what is he doing? On him it depends whether our language goes down to posterity degraded, barbarized, marked with pedantry and the bruises of assault and battery. Is he to spit and vomit the crudities of his own into the wells of our language? Will he adopt the Phonetic or the Philosophic method of teaching our language? He would consider first the phonetic. It was objected, and truly, that our alphabet was imperfect—various letters expressing the

same sound, and others distorted so as to express many sounds. Hence some rash spirits would set aside the sacred old alphabet and introduce a set of interlopers in its place, increasing the letters to forty-two, some only to thirty-six, while thirty-nine is the number generally introduced, perhaps because of the thirty-nine articles of the Church of England, or the thirty-nine stripes sanctioned in Scripture.

Others viewed this movement as they did the effort to introduce a new version of the Bible. Cæsar could not introduce a new letter into the alphabet, or Claudius a new word into the Latin language.

Our phoneticians are like children: give an inch and they will take an ell. There are too many Phætons trying to drive the chariot of the sun; too many Icaruses seeking to fly with waxen wings. This claim of perfect spelling is delusive, empirical, and unfounded. The spelling of a language must be taken into consideration. The etymology of a word and its analogy should settle its orthography. Prof. B. enumerated the objections to the phonetic innovation under six heads. There are two objects in spelling a word, one to express its significant sound and one its history. As in the term *city*, etymology traversed its orthography. Our spelling needs reforming but it must not be empirical.

Language is moulded by eternal laws, as are the planets held in their orbits. The improvements by our phonetic brethren will need to be searched for by a microscope. There are two arguments for phonetic spelling: one that it facilitates learning to spell—in other words it dispenses with spelling altogether; the other, that it dispenses with learning to read. So in the phonetic “good time coming,” we shall have no learning to spell or read at all.

But these positions are founded on two or three extravagant assumptions. *First*, that all men pronounce alike. This is not so. At the commencement all men were phonographers, and hence there were great diversities in spelling. Take the word *sudden*. It exhibits great diversities. Prof. B. recounted fourteen methods of spelling this word: as *soeden*, *sodain*, *sodeyn*, *sudeyn*, *sudein*; and so *Woburn* was subject to similar varieties, a postmaster having discovered about 40 different methods. Such would be the case in our phonographic millennium! (Laughter.) Our vocal pronunciations are too fine and subtle to be expressed in letters. The whole efforts of pronouncing dictionaries are an absurdity. The nice shades of articulation can not be thus trans-

lated. *Second*.—The phonetic spelling is said to depict to the eye what pronunciation does to the ear. The reformer perhaps rings the changes on *ough*; then serves up a tract on such words as *phthisic*, *debris*, etc., and sits down with a consequence as though he was the greatest prodigy of the age! Beside him, Newton, Locke, and Bacon were pigmies. The principle that every word should be spelled as it is sounded, is no argument at all. Each word has two distinct existences in which it moves. A word has as much for the eye as for the ears. It is a standing monument of the language. With phonetic spelling our language would be ruined. It would be full of vulgarisms. The differences in spelling are necessary. Prof. B. cited such words as *sun*, *note*, *knave*, *pier*, *right*, *sight*, *isle*, *consent*, *signet*, etc., having others of similar sound where they are spelled differently. There is advantage in this. A little letter silent to the ear is often eloquent to the eye. Thus in *chief*, *impugn*, etc., the sense of the word is preserved in the silent letter. Against this system, as a whole, we enter our protest. The whole strikes us as a Gothic, Vandal enterprise. The English language is the "mother of us all." She has made us what we are. To throttle her, mutilate her, draw out her fair limbs to fit the Procrustean bed, would be unnatural. "He that curseth his mother, let the ravens of the valley pick his eyes out." (Laughter.)

Education is not such short methods of giving instruction. It has no short cuts. It is a "leading out." There is no better way of doing this than by a radical study of the language. The phonetic method is a royal road, an air-line railroad, where you have only to keep your seat and look out for the locomotive. (Laughter.) This artificial way of teaching a language is profoundly unphilosophical.

Our language is not a mere machine or manufacture, but an organic product. It is vitalized. It is no gradual invention of the human industry. Speech is the correlative of thought, and both are developed together, like body and soul. In so far as a man has mastered a language, he has obtained clearness of thought.

Another objection is that phonetics destroy etymology and comparative philology. Can that be sound philosophy which would obliterate the history and marks of the birth of a language? Lord Bacon has well answered the phonetic argument, when he asserted that by the spelling of a word its relations and derivations were settled.

This phonetic spelling emasculates our language. It annihilates its history—cuts off all its connection with the past. Words have a body and a soul, and the phonetician would destroy both. He slays his thousands with the “jaw-bone of an ass.”

The last objection to the change is that it is impossible. It is no use to cry out “old fogey.” This has an *ad captandum* influence, but it amounts to nothing. Improvements must not depend upon caprice. He classed these reformers with those who endeavored to square the circle, find out the philosopher’s stone, or a perpetual motion. Every age must have its complement of fools, and these are ours.

Prof. B. cited Byron’s complaint of the Italian. To remedy our language, Pinkerton said it would require eight thousand vowel terminations. The speaker read a sentence with vowels appended to each word, with a consonant ending. This change was absurd, and the people would consent to it no more than they would to a system of trimming the body to give it power.

The correct method to reform our language was that of true philosophy. But as this was well understood, he would only present a brief outline. The study of Latin, Greek, and Anglo-Saxon is the best commencement of an English education.

The Latin recommends itself as the first in a process of intellectual culture. The whole Latin language and character is decidedly *objective*. Besides, there is a historic importance which is greatly overlooked. Our sciences have descended to us from that. For more than a thousand years the world lay a slave at the foot of that power, long after the Romans had mouldered in the grave. Our jurisprudence and ecclesiastical nomenclature were supplied by terms from that language. Our literature and institutions are offshoots from the Latin.

There was first, the 500 years of Roman ascendancy in Great Britain. Then literature was introduced into the island. Then the Anglo-Saxon, and after that the Norman period. Hence the knowledge of the Latin is an essential element as forming the basis of our intellectual culture.

Then the Greek comes next in the formation of the scholar. None but a scholar should be a schoolmaster. The Greek was essentially subjective. It was with freedom. It is difficult for a grammarian to educe its laws. It is full of nerve-like particles. Its beauty can not be defined, but it is felt by all. We have only to think of the Greek architects who built the temples,

the sculptors, the philosophers, the poets, greater than whom the world has not, nor ever will produce. The Latin and Greek must be retained.

The next pursuit must be the Anglo-Saxon. In the end of the fifth and beginning of the sixth centuries, the Anglo-Saxons conquered England and part of Scotland. The Anglo-Saxon is not so much an element as it is the basis of our language, on which words from other languages are engrafted. Four-fifths of the words in actual use in our language are of Anglo-Saxon origin. It is not only the largest element in our language, but it is the most expressive. A good English education must have the colossal statue of the Latin built on the basis of the Anglo-Saxon, and surrounded with the beauty of the Greek. The man of science is conversant with the past: the practical man with the present. Men of scientific culture are the only ones who should be school teachers. Having knowledge grounded in the past, he instructs men for the present, and so prepares for the future.

Mr. B. concluded with an extemporaneous appeal to the audience. Language is like the strata of Geology. As by that we trace the antecedent history of the earth, so by language we trace the past history of the world. It gives a true knowledge of man. By a study of Latin and Greek it was said that one person became as large as three men. Cicero called the study of language the study of humanity. The speaker had not seen a professor of the Latin who was not genial in his temper.

These languages stand before us as models of taste—they increase our love for the beautiful. There is an intimate connection between language and thought. The man who has the best knowledge of language increases our capacity for thinking. The value of the literature of a language is another argument.

The English language has a power, a dignity, which it is not possible for the phonetician to overthrow. He would conclude with this sentiment:

The Schoolmaster of the Hoosier State:—May he be a master of the English language, the husband of an American wife, the father of numerous children, all of them possessing the elegance of the Greek, the valor of the Roman, and the strength of the Anglo-Saxon.

It was now resolved to take up this report for discussion.

A motion was made to adjourn, and lost.

Prof. Henkle said that the gentleman had not discussed the subject which the Association desired. The Association wished a

report on the subject of using phonetics as introductory to that of common school learning. The report was not on that subject. He took middle ground between the gentleman and those who believed that the whole world rested upon phonetics. The gentleman had objected to phonetics as sweeping away etymology. Now, bridegroom was from the term *groom*. The *s* was superfluous in *island*. The most of our misspellings were from etymological ignorance. The methods of spelling *sudden* were under our present system, not under phonetics. He combated the idea that there would be any considerable difference of orthography by reason of discrepant spelling. There were nine different uses of the word *right*, yet it did not require different orthography. In the time of Chaucer, *debt* was spelled *dette*. He thought that if phonetics were introduced, it would make little difference about the etymology. It was the stem of a word not its vowels that settled the point. Etymology has no existence—phonology settled the point.

It has been remarked that if children learned phonetics at first and our common spelling afterward, they would learn more and better than by the usual method. It was only a method to gain ground, not to supersede labor. He would not however, if he had the power, substitute phonetics, on considerations of expediency. He hoped that the experiment now going on in Indianapolis would aid in fixing his opinion. But so far as the discussion was concerned, they had not gained an inch since the meeting at Lafayette.

Adjourned till 2 o'clock, P. M.

AFTERNOON SESSION.

The Association was called to order by the Vice President, Prof. Thompson.

On proposition of Mr. Hurty, the order of business was postponed twenty minutes.

Mr. A. D. Fillmore, of Illinois, spoke, taking grounds adverse to the positions of Prof. Bishop, which he pronounced false in logic, from premises to conclusion. The basis of Prof. B.'s argument was, that spoken derives its power from written. Did God teach man to speak and afterward to write? Yes. As it was in the beginning so it is now—the spoken is primary. The whole report

is without foundation in truth, and consequently the whole is false. He scouted the idea that the Bible might not be amended, averring that five years ago the American Bible Society had made 20,000 emendations, inserting words, etc. So the analogy of phonography was equally unsound. He scouted the last point of Prof. B.'s address. The five thousand teachers of Indiana could not read Latin, Greek, or Anglo-Saxon. Must they as unlearned, abandon teaching? He concluded by an anecdote of an old gentlemen who was compelled to purchase a new year's almanac because the children had destroyed the old one.

Prof. E. P. Cole said that the phoneticians had been compared by Prof. Bishop to geese. Once geese saved Rome: perhaps they might yet save the English language.

Prof. Hurty would take middle ground. The report of Prof. B. was a carefully prepared paper, better than some we heard. While, however, he paid such compliments to the English language, he did not notice that it had ever been progressive. The English language in the days of James I, was unlike what it is now. It has altered since we were children. He thought the gentleman was disposed to cut off all improvements. Suppose havoc was played with our etymology. What though it was done, if it made the language better? Suppose the word *thought* was spelled phonetically, would it destroy its etymology? Take the word *commandment*. Would it not be as easy to trace it to its roots in a phonetical alphabet as now? So with *incongruous*. He apprehended that good would result from the agitation of this subject. The question had been decided by good educators that children could be taught the orthography of the language better by learning phonetics first. But in words which have many letters, and but few sounds, is it not economical? We are economical. In taking the cars we take the short line road. We are for progress.

Mr. Fillmore said that this forenoon the whole matter turned upon one point, that the etymology would be lost. He thought of the advice of Paul to Timothy, to avoid utterly the "endless genealogies." We had had that principally this forenoon.

Mr. Terwilliger, of Anderson, asked—Did Shakspeare, Patrick Henry, and Byron understand the English language in the sense demanded by linguists? Ben. Jonson said Shakspeare had little Latin and still less Greek. What language did the Greeks study? Did Demosthenes study any language but his own?

He was astonished that some of our first scholars advocated such a close adherence to the usages of olden time. He was disposed to give credit to their opinion. Franklin said that he could not spend the time necessary for learning Greek and Latin. John Mifflin uttered similar sentiments. Dr. Wayland said he would advise no young man to enter college to study Greek and Latin. Sir William Hamilton had pronounced those persons dull who gave much attention to mathematics. If so, what a dull individual was Sir Isaac Newton. Mr. Terwilliger cited the names of Franklin and others, distinguished in mathematics; and declared that the improvements of the age had been made by mathematicians. He cited also Grimke, the celebrated linguist, in favor of the Anglo-Saxon, and gave his voice for the mathematical science. If a man could live as long as the antedeluvians, it might be well to study languages, but now it was a waste of time. He hoped our colleges would yet have professorships in the English language and English literature. We had translations which would give us all the ideas of value in the books of the ancients.

Prof. Hoss moved to request a copy of Prof. Bishop's report for publication, at such time as the editor of the *Journal* should see fit.

Prof. E. P. Cole opposed the asking of a paper for publication, when the fact was they did not wish to publish it.

Mr. Henkle hoped the resolution would pass.

Mr. Bowen moved to lay the subject on the table. Carried.

ESSAY DELIVERED BEFORE THE TEACHERS' ASSOCIATION, NEW ALBANY.

An idea is prevalent in this country that education is everything; that if a child has knowledge he needs nothing else; that education is the palladium of our free institutions. We often hear it said that if a man can give his children a good education, it is the best inheritance he can leave to them. So much does this idea prevail, that if a revolution, such as occurred in France, were to take place here, instead of making a Goddess of Reason, the American people would make Education their Deity. Nor would we find fault with this zeal for education if the term were taken in its

proper senses, but the error is, that we are educating the intellectual at the expense of the moral powers. While we teach the whole circle of the sciences (after a fashion), we permit the morals to grow up without cultivation. It is notorious that the American youth are more immoral than the youth of any other nation of equal privileges; that disrespect, such as would not be tolerated in a heathen country, is shown by our boys to their seniors, even to hoary hairs. The palladium of our civil liberty is *an open Bible*. The best inheritance is a good name.

The prevalence of this idea has led to another greivous error, that is, a multiplicity of studies. The idea having obtained that education is the sum of all good, the natural result is, a desire to have as much of it as possible, and this end is blindly sought to be compassed by learning a little of everything. Our colleges generally lay down a course of studies to be completed in five years, which require ten of constant study. Our female colleges especially err in this particular; requiring girls to take a course of study in three or four years, and that before they reach the age of nineteen, which a person of mature mind could hardly accomplish in twice the time. Some years since, I knew a young lady who was attending one of the female colleges in our own State, to be pursuing *nine* studies at once, viz.: English Syntax, Rhetoric, Physiology, Algebra, Geometry, Mental and Moral Philosophy, Botany, and Chemistry. *She made progress in them, too—completed them—graduated and received her diploma.* I saw it, and like the rustics in Goldsmith's "Deserted Village,"

"Still I gazed, and still the wonder grew,
That one small head could carry all she knew."

But she was conscious that she knew little or nothing of the studies she had pursued, and affirmed that she was behind her old classmates who had not gone to college. Nor can we blame our colleges and schools altogether, for such a state of affairs. In adopting such a course they have done so in deference to public opinion, when perhaps, at least a partial accommodation of themselves to it was necessary to their very existence; depending as such institutions, in our country, too often must, upon popular patronage for their support.

But they have not done what they could. When they ought to have held as near as possible to the true standard, they have sometimes bowed to perverted public opinion for the sake of popularity.

Some months ago, a gentleman told me that one morning he met a little girl, eight or nine years of age, with her books on her arm going to school. Being a great friend to schools, he entered into a conversation with her about her studies. She mentioned four or five she was pursuing, including Philosophy, and added that next quarter she was going to study Astronomy. Curiosity led him to inquire what progress she had made in Arithmetic. He was not at all surprised to find that she had reached *Compound Numbers*. Now, who will deny that she was *well prepared* to take up the study of Astronomy.

To meet this morbid sentiment of our people, another abomination has been invented, viz.: Primary works, intended to level some of the more advanced sciences to the comprehension of young pupils. Thus we have *Philosophy for Beginners*, *Chemistry for Beginners*, *Botany for Beginners*, in which children are set to studying before they can read, or even spell correctly, learning just enough to make themselves ridiculous. Every teacher ought to scout such books from his school. Let children wait till they are old enough to pursue the study of these sciences, then they can understand them without the aid of introductory works. Fellow teachers, if these evils are ever corrected, *we* must correct them. We shall meet difficulties, but they must be manfully met and conquered. We must march right through them, not go round them. We must teach our people to know when their children are well taught. We must teach them to know what studies and how many their children ought to pursue; to know that a good foundation is necessary before a good superstructure can be erected; that there is more benefit in teaching a youth how to teach himself, to govern himself, to form good habits, than in simply teaching him to read, write, and cipher. The majority of parents are not so blind, but that when they see which is the best way, they will endorse it; but whether they approve or not, *let us do our duty*.

W. W. M. M.

NEW ALBANY, Dec. 15, 1856.

HARD STUDY.—It is a very common thing to attribute the premature disability or death of students to too close application to their studies. It is a mischievous error that severe mental application undermines health.

TOBACCO.

What is tobacco? "A narcotic—a stupefier—a deadener of nervous and muscular energy!" If any man disputes this, and asserts that he finds himself more capable of intellectual or muscular effort when he has a quid in his mouth, we congratulate him on his improved astuteness; we may betray our own want of the precious intellectual quickener, but we will venture the question: How much did it sharpen your logic-chopper when you took the first quid? And how majestically did you stand on your legs when you first felt its full effect?

Every one must remember the first effect of tobacco. *Nausea, vertigo, vomiting, and relaxation of the entire muscular system*, are its invariable effects.

Now, the reader will please to remember that all the symptoms he first experiences from tobacco are the inevitable results upon a *natural or healthy condition of the body*: and if he succeeds, by perseverance in its use, in overcoming the immediate consequence, it is only because the alarmed and abused nerves have summoned the force of youthful vigor to bear the invasion as long as possible before they capitulate. Breath, food, and drink are the means of resistance, and the besotted youth soon discovers that the quantity of the latter must be increased, and its quality strengthened, if he would resist the invader and continue to perform his ordinary duties without showing plainly his incapacity to stand upon his legs. Thus it is that tobacco, either used by smoking or chewing, *is the direct introduction to drunkenness.*

Our remarks apply in a much more forcible manner to smoking than chewing. Some people are so silly as to suppose, because they do not spit whilst smoking, that no harm can ensue; but they should remember that the oil of tobacco, which contains the deadly NICOTINE, (equally deadly and almost as rapid in its actions as strychnine,) is volatilized, and circulates with the smoke through the delicate lining membrane of the mouth at each whiff of the cigar, and is absorbed by the extensive continuation of this membrane that lines the nostrils, and acts upon the whole body. The smoke of tobacco is indeed much more rapid in its stupefying effects, as every professed smoker knows; it is usually called "soothing" by its votaries; but this is, of course, only the first stage of stupefaction; it acts precisely as opium or other narcotics do.

Moreover, the reader will observe the older physicians used to throw the *smoke* of tobacco into the intestines, when they sought its terribly relaxing effects on the body in rupture or constipation of the bowels, or for reducing dislocation. *Nicotine* was the awful agent chosen by Bocarme for poisoning his brother-in-law, *because it killed and left no sign* whereby to convict him. At each whiff of smoke, it is known that a good portion of a large drop of the oil of tobacco circulates through the mouth; we have often seen it blown out of the mouth and condensed on the thumb nail, by

men who had the ability to contract the lips to an opening sufficiently small for that purpose. Five drops of the oil of tobacco will kill a large dog. The throat often becomes excessively dry and irritable in smoking, and there is a morbid thirst produced that greatly debilitates digestion, by diluting too much the fluids of the stomach—robbed, also, of its healthful saliva by the spitting.

If we have used a moderate share of intellect and a very extensive observation aright, we can find no cause of sufficient power, except tobacco, capable of producing the wrecks of manhood that often come under our professional notice. The dull and leaden eye, the trembling hand, and insecure and unmanly step, the vacillating purpose and incapacity to reason correctly on the most simple subjects, are too often seen connected with the aroma of the deadly weed, as the victim unfolds in trembling accents his tale of blighted prospects and chilled affections.

So far are we from doubting its power over the moral and physical welfare of the race, that we have not a doubt that it has infinitely more to do with the physical imperfections and early death of the children of its votaries, than its great associate, drunkenness, itself.—*The Scalpel*.

NORMAL SCHOOLS.

AD

BY REV. ANDREW BANKIN.

We must have teachers who know the theory and practice of school-keeping—who know what to teach and how to teach—who have all the information, discipline, and other qualifications requisite for a correct and successful discharge of their duty. The ordinary course of education will never produce them. It never has—it never will. If we would have an ample supply of able and accomplished teachers, we must adopt proper measures to raise them up—we must have institutions to educate them. A very few of extraordinary powers may be found, as we sometimes find able mechanics and great mathematicians, who had no special training in their favorite pursuits; but these general exceptions to a general rule will never multiply fast enough to supply our schools with able teachers. The great majority that offer themselves for this service, having obtained sufficient education to presume to undertake it, and who will find employment, because they are cheap servants, are not of this class. Teachers must be educated—trained for their work. This doctrine has been acted upon in Prussia ever since 1735—that is, 121 years; and the great success of the German system is attributable to those provisions of the system which relate to teachers, connected with Normal

schools, or schools established and sustained by government to educate instructors of primary schools. There are many of these schools, located in the different departments of the country, resorted to by teachers from all parts of Germany, to be trained in science and literature, and in the principles and practice of teaching. In 1848, there were 34,000 teachers, having charge of primary schools, who had been thus thoroughly educated in the studies they were required to teach, and in the best methods of teaching. No young man was admitted into a Normal School who was not sixteen years of age—who had not passed through a course of instruction in an elementary primary school—nor could any man be received, of the excellence of whose moral character there was the least ground of suspicion. The course of instruction is three years, the first of which is devoted to the continuation of the course of instruction which the pupil commenced in the primary school; the second, to instruction of a still higher character; and the third, to practice in a primary school connected with the establishment. The examinations are very rigid, and no one is allowed to instruct a primary school who has not completed the course of study pursued at the Normal school, and who has not testimonials of due qualification from the school commissioner.

In 1832, M. Guizot, minister of public instruction, addressed to the Chamber of Deputies the following sentiments: "It can not be too often repeated, that it is the master that makes the school. Primary instruction depends altogether upon corresponding Normal schools. The prosperity of these establishments is the measure of the progress of primary, elementary instruction. Normal schools, wherever they exist, form in each department a vast force of light, scattering its rays in all directions among the people. The Normal school has rendered immense service to the country; it has given us our best instructors; it has raised to a considerable extent the love of popular instruction. The teachers that come from Normal schools are infinitely superior to others. They are superior in capacity—by their faithful observance of rules—and almost always by their zeal, and by their conduct toward the local authorities, and the heads of families."

So early as 1805 is found in London the germ of institutions in England for training teachers for elementary schools. Subsequently the necessity of training well-qualified instructors, by means of a special course of instruction and practice, was ably discussed, and the mode and results of such training, as exhibited on the Continent, and especially in Prussia, were ably advocated, in Parliament, in pamphlets, reviews, and the daily press. In 1835, Lord Brougham, in a speech to the House of Lords, said: "These seminaries for training masters are an invaluable gift to mankind, and lead to the indefinite improvement of education. It is this, above all things, that we ought to labor to introduce into our system. Place Normal schools—seminaries for training teachers—in a few such places as London, York, Liverpool, Durham, and Exeter, and you will yearly qualify 500 persons, fitted for diffusing

a perfect system of instruction all over the country. These training seminaries will not only teach masters the branches of learning and science, in which they are now deficient, but will teach them what they know far less—the mode of imparting what they have or may acquire—the best mode of training or dealing with children, in all that regards temper, capacity, and habits, and the means of stirring them to exertions and controlling their aberrations." The result was, that, in 1853, there were 36 Normal schools or training colleges in England and Wales, four in Scotland, and one in Ireland, in successful operation. These institutions are doing the same great work in Britain that they have accomplished in Germany and France. They are regarded as among the most useful institutions of the British empire.

In 1849, the Spanish government, by royal decree, established a central Normal school at Madrid—nine superior schools, twenty elementary schools on the Peninsula, and two in the Balearic and Canary Isles.

Normal schools exist also in Belgium, Denmark, Sweden, and Greece. In all foreign countries, wherever the inestimable blessings of universal education are appreciated, and a system for their diffusion exists, seminaries to educate teachers are established. They are the principal element in every organized system for the advancement of popular learning. The people say, "What constitutes a good school?" Not a building constructed on the best model of school-house architecture—nor its furniture and conveniences—nor its spacious, elegant, and healthy playgrounds—nor excellent text-books—nor its library well furnished with books, apparatus, maps, charts, and instruments—nor numerous healthy and bright scholars. None, nor all of these things. But an able and accomplished teacher. The school is what the teacher is. Therefore wisdom everywhere decides—Educate your teachers, and thus come good schools. This is the universal doctrine of the friends of popular education in foreign countries.

Similar sentiments are entertained by the same class of enlightened citizens in the United States and in Canada.

In 1834, when the citizens of Massachusetts discovered that a great part of their money annually expended for the purpose of educating the rising generation was wasted, in consequence of the incompetency of instructors, as wise men they immediately took effectual measures to establish seminaries to educate teachers. Among the leading advocates of the establishment of such institutions were the Rev. Dr. Putnam, J. Q. Adams, and Daniel Webster. Mr. Putnam said: "If there be any department for the able and proper performance of whose duties special instruction is absolutely necessary, it is that of the educator. I have once taught school, I believe with tolerable acceptance to my employers; but though just from college I found myself deficient in the first steps of elementary knowledge. I had studied all the mathematics required at Cambridge, but did not know how to come to a young mind so as successfully to teach numeration. I

had studied the classics, but could not teach a boy how to construct a simple English paragraph. I found myself wanting in that highest of arts, the art of simplifying things so that children can grasp them. From my own experience, I venture to say, that no liberal profession comes so short of its objects as that of the instructor. Teachers need specific preparation for their work, and this very preparation is what Normal schools confer. If there is a province in which specific preparation is necessary, it is this. We want no law schools, or any higher schools or colleges, at this time, so much as we want seminaries to qualify teachers for their important duties."

Mr. Adams said: "Our old system has made us an enlightened people, and Normal schools would elevate the town schools to the new wants of a growing community. On this great and glorious cause let us expend freely, yes, *more* freely than on any other." Mr. Webster said: "I am anxious to concur with others in aid of this project. The ultimate aim is to elevate and improve our common schools, and secure competent instruction to every child that is born. No object is greater than this, and the means, and the forms, and the agents are each and all important." Regarding common schools as the foundation of our social and political system, and rejoicing in the noble efforts made to advance them, Mr. W. expressed his readiness gladly to bear his part of the expense of supporting teachers' seminaries.

Massachusetts has four Normal schools for the education of teachers for common schools, and forty-eight scholarships connected with colleges for the education of teachers of high schools. Annual appropriation \$11,000.

In 1838, four years after the establishment of teachers' seminaries in Massachusetts, H. Barnard, of Connecticut, commenced a series of efforts, which resulted in the opening of a similar institution in that State. His doctrine was, As are the teachers, so are the schools; poor instructors make poor schools; good teachers make good schools.

New York has a State Normal School at Albany; the average number of students from every county in the State is 250. It has graduated 780 instructors, of whom 391 were males and 387 females. It has a library of 7,000 volumes—1,000 miscellaneous books, and 6,000 text books. The State appropriates \$12,000 annually to sustain it. There is also in the city of New York a Normal School which has 21 teachers and 782 pupils, of which Hon. S. S. Randall, the city superintendent of schools, speaks in the following manner: "No portion of our system of public instruction is of greater practical value and importance than that which provides for the complete and continued preparation of the several teachers employed for their responsible position. With the sole exception of those already holding, from the city superintendent, certificates of qualification of the highest grade, each female teacher, in the employment of the Board, is required to attend the Normal school on Saturday of each week, and the several male

teachers on the evenings of Tuesday and Friday. In these institutions they are thoroughly and systematically carried forward, in the several branches of education requisite to a complete knowledge of their profession; and on the completion of the full course of instruction prescribed for that purpose, they are entitled to the highest certificate of qualification. In the mean time, they are constantly engaged in the practical work of instruction and discipline, in their respective schools, under the immediate supervision of experienced teachers. The combination of theory and practice, thus afforded, constitutes a peculiar and crowning excellence of our system of public instruction."

Pennsylvania has a seminary in Philadelphia for the education of teachers. In 1855, the Legislature of New Jersey established one at Trenton, to which it appropriated \$50,000, to be paid in annual installments of \$5,000 each. Rhode Island has a similar institution at Providence, established by the Legislature in 1854. The Legislature of Michigan established a Normal school at Ypsilanti in 1850. The citizens of the place gave \$13,000 to furnish buildings. The State of Kentucky has a teachers' seminary at Frankfort. In 1847, the Parliament of Canada West established a seminary at Toronto to educate teachers of common schools on the German plan; Canada East has similar institutions.

It appears, therefore, that we have thirteen Normal schools in eight States of the Union, four of which are in Massachusetts—not one-half the number which the Spanish government established in Spain in 1848, and about one-fourth of the number in Germany, and one-seventh of the number in France, at the same date. In addition to these Normal schools, teachers' institutes are holden in several of the States with marked success. The difference between the teachers' institute and the Normal school is not unlike that between a muster-drill of a few weeks and a regular course at West Point.

These facts evince the prevalence, to a certain extent, of sound sentiments with respect to the only way thoroughly to educate the rising generation. To educate the uneducated world, you must first educate its teachers. To educate the three and a half millions of children in the United States, you must first educate 92,000 teachers. Reason, philosophy, common sense, the results of the practical application of this doctrine to the elevation of the standard of education in Europe and America, during the last century and a quarter, commend it to all mankind for adoption.

The principle advocated here is one to whose application, in other relations, wise men are no strangers. When the Czar of Russia would teach his subjects the arts and practice of war, he supports at military schools, in different parts of his empire, 9,000 cadets, and educates them thoroughly in theory and practice, that they may communicate military knowledge through the army. This is a wise, an economical investment in the military talent of young men. He proceeds in the same way when he would dis-

seminate through his realm a scientific knowledge of mining, agriculture, of the construction of roads and bridges. He educates young men to educate others. England acted on the same wise principle when, in 1856, she appropriated \$270,000, of the \$4,000,000 which she expended for education, to support fifty-four Normal schools to educate teachers of primary schools. Doubtless the expenditure of every dollar of the \$270,000 rendered every other dollar of the \$3,730,000 devoted to primary schools a thousand times more available to educate the rising generation than it would have been had the teachers employed been destitute of special training for their work. The greatly improved education of 2,108,473 scholars in England and Wales corroborates this statement. The same truth is illustrated, as well as confirmed, by the history of popular education in Germany during the last century. It is visible in Prussia, Austria, and every other German State. In Prussia, the influence of the forty-six Normal schools, at which the 34,030 teachers of 2,540,775 scholars have all been educated, attests the same. The same may be learned by the elevation of the standard of popular education in France, within the last twenty-five years, by the influence of about 100 Normal schools over its three or four millions of scholars. And, doubtless, were one-fourth of the \$9,000,000 or \$10,000,000, annually expended on primary schools by our nation, appropriated to educate and train teachers for their work, the good accomplished would be increased ten if not twenty fold above present results.

Therefore, while a choice selection of the best scholars found among the graduates of our colleges, to preside over our higher institutions, is deemed wise, shall not proper and early measures be taken to qualify instructors successfully to perform the more difficult and delicate part of education, that of the primary school?

This subject addresses itself to governments—the constituted guardians of public interest, and especially of the education of the youth. It is a primary duty of the state to educate the children of the state. This is the opinion of all great legislators and statesmen, of great political philosophers of all ages and nations, of all the great champions of civil and religious liberty in the Old World and the New. This has ever been the doctrine of American statesmen. "Educate the people," was the first admonition addressed by Penn to the commonwealth which he established. "Educate the people," was the last legacy of Washington to the republic he founded. "Educate the people," was the unceasing exhortation of Jefferson. "Educate the people," said Clay, Adams, Webster, and all their patriotic and illustrious predecessors and compeers. Educate, correctly and thoroughly, all the children of the state, is the demand of the prevailing sentiment, not only of our own nation, but of all civilized nations. The people, with united voice, say, "Give our sons and daughters a thorough and accomplished education." They require liberal, ample, and wise provision for this purpose. A full compliance with this demand is a cardinal element in every wisely constructed system of

popular education. It is fundamental. It is the propelling power—the mainspring of the machinery. The establishment of teachers' seminaries throughout the United States, in character and number sufficient to qualify our almost one hundred thousand teachers, is one of the most desirable and important things of the age. It is the great reformation which should be made, and would be the crowning glory of these times.

"MUSIC HATH CHARMS TO SOOTHE THE SAVAGE BREAST."

In looking over an old "newspaper" printed several ago, I came across this beautiful piece, which struck me as being true to nature.

"Could n't, cos he sung so!" Leaning idly over a fence a few days since, we noticed a little four-year old "lord of creation," amusing himself in the grass by watching the frolicsome flight of birds, which were playing around him. At length a beautiful bobolink perched himself on a bough of an apple tree, which extended within a few yards of the place where the urchin sat, and maintained his position, apparently unconscious of his close proximity to one whom birds usually consider a dangerous neighbor.

The boy seemed astonished at his impudence and, after regarding him steadily for a minute or two, obeying the instinct of his baser part, he picked up a stone lying at his feet, and was preparing to throw it, steadying himself for a good aim. The little arm was drawn backward without alarming the bird, and "bob" was "within an ace" of danger, when lo! his throat swelled, and forth came nature's plea: a-link, a-link, a-link, bob-a-link, bob-a-link, a-no-sweet, a-no-sweet! I know it, I know it, a-link, a-link, don't throw it, throw it, throw it, &c.—and he didn't! Slowly the little arm fell to its natural position, and the now despised stone dropped. The minstrel charmed the murderer! We heard the songster through and watched his unharmed flight, as did the boy, with a sorrowful countenance. Anxious to hear an expression of the little fellow's feelings, we approached him, and inquired, "Why did n't you stone him, my boy? you might have killed him, and carried him home."

The poor little fellow looked up doubtfully, as though he suspected our meaning, and with an expression, half shame and half sorrow, he replied:

"*Could n't cos he sung so!*"

Who will say that "music hath no charms to sooth the savage breast," or aver that God hath not made melody to move the purer fountains of our nature, to awaken those sympathies that are kindred to Heaven, the Angels, and to God himself. Let the sweet tones of music break upon the ears of the dull school boy, and he will awake with new life and energy. Pour the notes of melody into the ears of the willful child and you disarm him; the stone will fall from his heart, and he will become obedient and attentive. Let music be the first to break the silence of the school-room in the morning, and the chords of young hearts that are put in motion will continue to vibrate during the day. Happy will be the time, when not only the tones of our school-bells can be heard all over the land, but when the notes of our school-children, in the morning, breaking upon the silent atmosphere along the Atlantic coast in the East, shall reverberate along the Gulf of Mexico, and the echo be heard in California.

Oh! Teacher, if you can not sing, go and learn. I have heard of persons who learned to read after they had lived their three score and ten. You can learn what is not so difficult—to sing.

"There is a music in the heart,
A lonely, deep refrain,
That oft o'er memory's chord will start,
Like Memnon's melting strain.
The noonday carol of a bird,
The smile we can not win,
A leaf by morning's zephyr stirred,
May touch the heart within."

R. M. J.

IMPRESSIONS OF RAIN-DROPS.

In the days of early mystery, before men were, when the cavernous earth was haunted with strange shapes, to which the learned have given strange names—the ichthyosaurus, the megatherium, and the pterodactyle,—the translators of the fossil writings in the rocks tell us that, at various epochs, floods of ruin swept over the yet unformed globe.

Then the forests of tree fern were submerged; then uncouth reptiles were petrified in the fissures where they had crept to hide from the crashing elements; and then were shells, plants, and leaves arranged in that vast subterranean cabinet which is the wonder of recent ages.

Nor these alone. When the chaotic turmoil began to subside, and a new order of life was struggling up from the ruin, light showers of rain fell upon the seething expanse, and left perfect impressions of their drops in the then soft adamant.

If thus the secrets of the material world have been engraved and are revealed, shall thy history, O soul! be left to pass into oblivion? All that lies hidden within—the low desire, the dark, unholy motive—must at last be upheaved to light, from the overlying strata of time and forgetfulness; and so shall all that is noble, pure, and true. And if, when the surges of passion are growing calm, tears of penitence follow the commotion, they, too, shall leave their lasting impress, and be recognized as having antedated a new and sublimer life.—*Independent Class-Reader.*

ELECTRICAL PHENOMENA.

There seems to have been for the last two or three weeks quite a disturbance in the electrical fluid. We have observed in our own person some unusual developments. We did not know but that the “spirits” were about to make a “medium” of us. Perhaps our skepticism was too much for them. The first indication of anything unusual was the fact that every time I opened the door of my stove, by the aid of the tongs, a brilliant spark of electricity was observed. I supposed it was caused by the heat, until one day I accidentally touched the elbow of Prof. Stevens’s little girl, who is a little more than a year old, when a snap was heard. She kept rubbing her arm some time after, showing that it had left an unpleasant sensation. On trying the experiment a few seconds after, the same snapping was heard. A third trial did not succeed. The next day I put my knuckle to my wife’s nose, and a spark passed, and the effect was, that she kept rubbing it for some hours afterwards. Similar instances were observed occasionally for about a week. One cold night, my wife took from a cold room a woollen blanket, and brought it into a warm room. It began to snap as it was shaken, upon which she dropped it suddenly, and was afraid to take it up for some minutes. I do not suppose the heat had anything to do with the phenomena. The last week (Feb. 3) I have not observed any of the above phenomena except the stove spark. To show that this disturbance has extended over the whole country, I quote the following from the Philadelphia Ledger.

"During the greatest intensity of the snow storm on Sunday night, the electrical effect on the wires of the magnetic telegraph, in the office at Chestnut street, near Third, was curious and striking. There was a continual snapping, cracking, and flashing, like the noise when wood is burning briskly. At one place, on a covered wire, the stream of electricity suddenly appeared about the size of a flame from an ordinary gas burner, and continued to burn just like a gas light for more than five minutes. On examining the wire, it was found that half an inch of the covering was burned off, and the wire beneath it with which it was in contact. Now, what caused this great development of electricity? Could it arise from the friction with the atmosphere of the snow-flakes falling so thickly and rapidly over an extensive range of country, or the friction of high winds which prevailed? or were the snow and wind themselves only the effect of a disturbance of the equilibrium of the magnetic fluid, which seems to pervade all substances upon the face of and within the globe, and which made these visible manifestations in its efforts to restore the balance and supply the deficiency of the magnetic element in this region? Whatever was the cause, the effect was striking enough to show that the subject of meteorology, hitherto studied without much system, and by isolated observers only, contains interest enough in its science, to induce a more thorough investigation and a wider observation, with accurate instruments, than it has ever received.

"A correspondent also calls our attention to similar electrical indications observed elsewhere. He says his brother, who was on a visit at a friend's house, in the western part of Green street, observed, on approaching the gas fixture and register belonging to the heater, that a spark of electricity was received with a shock severe enough to be unpleasant. It was noticed that the same effect was produced by applying the knuckles to some persons in the house; they appeared to be charged with electricity. He communicates the fact for the purpose of calling the attention of electricians to the subject."

W. D. H.

MISCELLANEA.

"We know not what a day may bring forth," is an old saying, but experience constantly confirms its truth. For instance, who would have thought, a few weeks ago, that our humble self should have been invited not only to approach, but actually to sit down on one corner of the hep—heptagonal stool appropriated to the sub-editors of the *School Journal*? Such an occurrence naturally leads us to inquire the why and wherefore, and here is the result. As the other corners of our "school" are occupied by those who

fill important positions in the educational field, we suppose it was concluded, that the too often forgotten *country schools* ought to have at least *one* representative at headquarters, and we long for the ability to speak for them as effectually as do our elder co-laborers for their more prominent institutions.

But we have begun to doubt whether our town and city schools *are* so much more important. The country is more beautiful. God made it, and Nature's children are found there. Their minds are more alive to impressions of beauty and fitness in the natural and intellectual world; and though they are often wild and wayward, yet they have not so much to *unlearn* as those who attain a premature manhood, at least in their own eyes, amid the bustle and excitement of the town. Then give us the country schools, with good teachers, not with the accommodations once accorded to them, but with each a good house well lighted and warmed. Give us a large yard with shade trees, and a paved walk, at least in front of the door, and mats and scrapers in the proper place. Let us have, in the *inner temple*, maps, globes, apparatus, and a "Quarto Dictionary;" let us have brooms and buckets, with plenty of water; a wash basin, towels, and looking-glass; then curtain the windows with white muslin, and we will show you a cheerful, home-like place. where pupils will

"Love to go, in summer's heat or winter's snow."

But as we meant to pen miscellaneous thoughts, instead of telling how we think a country school-house and its occupants ought to look, we will here take it for granted that it is right to ask questions to draw out information from wiser heads; and to express our candid opinions concerning the text-books and other professional *tools* that we have to make use of.

And, first, as one object of the *Journal* is to benefit teachers whose advantages have been very limited, and to give the people an idea what kind of teaching is really good,—should it not give in every number some such plain, practical, familiar instruction as would be given in a well conducted Teachers' Institute? Should it not insist much and often on the recent improvements in teaching little ones to read, so long as nine-tenths of those in the rural districts are still *tortured* into the knowledge of that "art of all arts," in the old alphabetical, hum-drum way. Let those who use the *word method*, give their experience, and in such a way that teachers who never tried it, or saw it tried, can successfully adopt it, and thus save months of toil to the weary and discouraged

child. Let those who have a larger share of small children under their care, speak out on this vital point of teaching, for by so doing they may aid others very much. C. M. B.

MATHEMATICAL DEPARTMENT.

W. D. HENKLE, Editor.

SOLUTION OF No. 21.—By R. W. McFARLAND.

Let a = the given area, and d = the diameter of the given circle. Also, let y = the semi-base of the required triangle, and z = its altitude. By the conditions of the problem we easily get the following equations:

$$yz = a, (1)$$

$$\text{and } (d - z)z = y^2, (2)$$

Taking the value of y from (1) and substituting it in (2) we get

$$y^4 - ady = -a^2$$

Construct a parabola with the half parameter = 1, and from the vertex V set off on the axis VR = 1. From R erect the perpendicular RW = $\frac{ad}{8}$. With W as a centre and a radius = $\frac{1}{8}(64 -$

$a^2 + a^2d^2)^{\frac{1}{2}}$ describe a circle cutting the parabola in two points, E and L, and from E and L draw ordinates to the axis, then one of these ordinates will equal y or half the base of the required inscribed isosceles triangle.

Similarly, for the circumscribed, but the operation is more tedious.

[To those of our readers who are not familiar with the geometrical construction of cubic and biquadratic equations, we would say that cubic equations may be constructed by two parabolas, or by a circle and a parabola, or by a circle and an equilateral hyperbola, or by a circle and an ellipse, &c.; and biquadratics by a circle and a parabola, or by a circle and ellipse, or by a circle and an hyperbola, &c. Newton also made use of the conchoid and cissoid in the construction of cubics and biquadratics.

For further information on this subject, we refer the reader to *Halley's Paper in Philosophical Transactions*, 1687 (see *Hutton's*

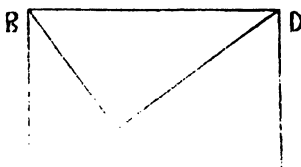
Abridgment, vol. 3, pp. 395, 407); *Colson's Paper*, 1707, vol. 5, pp. 334, 342; *Newton's Algebra*, pp. 279, 326; *Maclaurin's Algebra*, pp. 351, 365; *Hutton's Math. Dict.*, vol. 1, p. 331; *Barlow's Math. Dict.*, word *Construction*; *Lardner's Algebraic Geometry*, pp. 268, 285; *Hutton's Mathematics*, vol. 2, pp. 140, 142; *Application de L'Algebra a la Geometrie*, par M. Bourdon, pp. 595, 398; *Franceur's Mathematics*, vol. 1, pp. 398, 401; *Hampel's Geometrische Constructionen*, pp. 152, 155; and *Robinson's Mathematical Recreations*, pp. 37, 49.—Ed.]

No. 22.

[One of our correspondents writes that my solution of this problem, given on p. 377, Vol. 1, improperly numbered 25, "is not the kind of solution evidently demanded by the problem, which requires a *line to be drawn*, &c.; that is, a *geometrical construction*. You simply pointed out the method of a *numerical solution*." This assertion of Mr. Stribbling's was "evidently" hastily made, for he is too good a geometer not to know that a triangle can be *geometrically constructed* when two angles and the included side are known.

The engraver made bad work of our figure by omitting one line, and showing clearly by the others that he is far from being an adept at his art.—Ed.]

SOLUTION OF No. 27.—BY ELIZABETH HOSBROOK.



$BD=320$, and $AC=180$. The triangle BAD and BAC are similar, whence $320 : AB :: AB : 180$, or $AB^2=320 \times 180=1600 \times 36$, or $AB=240$.

[This problem was solved by *Jas. Harris*, *G. W. Basset*, *A. W. Cousee*, *C. Z. Eddy*, *Judge Clark*, *Jacob Staff*, *R. W. McFarland*, and *E. M. Stribbling*.]

SOLUTION OF No. 26.—BY JACOB STAFF.

$$\begin{aligned}x^2y + xy^2 &= a \quad (1) \\x^2y' + x'y^2 &= b \quad (2)\end{aligned}$$

Divide (2) by (1) and the quotient properly arranged will be $xy(x+y)^4 - 5x^2y^2(x+y)^2 + 5x^3y^3 = \frac{b}{a}$. Substitute for $x+y$ its value

$\frac{a}{xy}$ obtained from (1) and clear of fractions, and there will result $5(x \times y)^6 - (5a^2 + ab)(xy)^3 = -a^4$, a quadratic from which xy can be found. Put m for the value of xy and we shall have $xy = m$, and $m(x+y) = a$, which are easily solved.

[This problem was solved by J. K. Cravens, C. Z. Eddy, R. W. McFarland, and E. M. Stribbling.]

ACKNOWLEDGMENTS.—Chas. Henry Royce, son of the Ohio Phonetic State Agent, sent a solution to No. 25, and A. W. Couse to both 24 and 25. These solutions came too late for the last number. The mathematical article is written just one month before publication.

PROBLEM No. 31.—BY ELIZABETH HOSBROOK.

A liberty pole 120 feet long, standing on a mound, was broken, and its top struck the ground 50 feet from its base; and 20 feet perpendicular to the foot of the pole just reaches the fallen part. Required the length of either piece.

PROBLEM No. 32.—BY WM. COLE.

To construct a triangle, the base and vertical angle being given and the sum of the perpendicular and longer of the segments of the base being a *maximum*.

PROBLEM No. 33.—BY M. C. STEVENS.

A mass of copper and tin weighs 80 lbs., and for every 7 lbs. of copper, there are 3 lbs. of tin. How much copper must be added to the mass, that for every 11 lbs. of copper there may be 4 lbs. of tin?

A mental solution is required.

PROBLEM No. 34.—BY JACOB STAFF.

Divide any cube number (8) into two other cube numbers other than 8 and 0, if possible.

MATHEMATICAL ITEMS.—John Muller, commonly called *Regiomontanus*, because he was born in Konigsberg (King's Mount-

ain), introduced into Arithmetic the use of decimal fractions. He was born in 1436.

Kepler conceived a circle to be composed of an infinite number of triangles, having their common vertex in the centre of the circle, and their infinitely small bases in the circumference.

Peletarius remarked this curious property of numbers, that the sum of the cubes of the natural numbers is the square of the sum of the numbers themselves.

EDITORIAL MISCELLANY.

HOW WATER-SPOUTS AND WHIRLWINDS ARE PRODUCED.—Dr. M. F. Bonzaro, of New Orleans, communicates to the *Bulletin* of that city, the following interesting electrical experiment, by which he explains the philosophy of water-spouts and whirlwinds. From the conductor of an electrical machine suspend, by a wire or chain, a small metallic ball, (one of wood covered with tin foil,) and under the ball place a rather wide metallic basin, containing some oil of turpentine, at the distance of about three quarters of an inch. If the handle of the machine be now turned slowly, the liquid in the basin will begin to move in different directions and form whirlpools. As the electricity on the conductor accumulates, the troubled liquid will elevate itself in the center, and at last become attached to the ball. Draw off the electricity from the conductor to let the liquid resume its position; a portion of the turpentine remains attached to the ball. Turn the handle again very slowly, and observe now the few drops adhering to the ball assume a conical shape, with the apex downward, while the liquid under it assumes a conical shape, with the apex upward, until both meet. As the liquid does not accumulate on the ball, there must necessarily be as great a current downward as upward, giving the column of liquid a rapid circular motion, which continues until the electricity from the conductor is nearly all discharged silently, or until it is discharged by a spark, descending into the liquid. The same phenomena takes place with oil or water. Using the latter liquid, the ball must be brought much nearer, or a much greater quantity of electricity is necessary to raise it.

Those who have had occasion to observe the sublime phenomenon of a water-spout will at once perceive in the experiment a faithful miniature representation of the gradual formation, progress, and breaking up of that grand phenomenon.

“COMPRESSING ELECTRICITY.—The London *Morning Chronicle* states that a great experiment, heralding an important scientific discovery, was tried some time since at Vincennes, in the presence of many eminent and practical judges. From the demonstration then and there made, it would appear that the secret of compressing and governing electricity is at length discovered, and, according to the *Chronicle*, the power may now be considered ‘as the sole motor henceforward to be used.’ A small mortar was fired by the inventor, at the rate of a hundred shots a minute,

without flashing, smoke, or noise. The same power can, it is claimed, be adapted to every system of mechanical invention, and is designed to supersede steam, requiring neither machinery nor combustion for its successful operation."

THE PRISM OF ODORS.—There are certain odors which, on being mixed in due proportion, produce a new aroma, perfectly distinct to itself. This effect is exemplified by comparison with the influence of certain colors, when mixed, upon the nerve of vision; such for instance, as when yellow and blue are mixed, the result we call green; or when blue and red are united, the compound color is known as puce or violet. Jasmine and patchouli produce a novel aroma, and many others in like manner; proportion and relative strength, when mixed, must of course be studied, and the substances used accordingly. If the same quantity of any given otto be dissolved in a like proportion of spirit, and the solution be mixed in equal proportions, the strongest odor is instantly indicated by covering or hiding the presence of the other. In this way we discover that patchouli, lavender, neroli, and verbena are the most potent of the vegetable odors, and that violet, tuberose, and jasmine are the most delicate.

Many persons will at first consider that we are asking too much, when we express a desire to have the same deference paid to the olfactory nerve as to the other nerves that influence our physical pleasures and pains. By tutoring the olfactory nerve, it is capable of perceiving in the atmosphere matter of the most subtle nature; not only that which is pleasant, but also that which is unhealthy. If an unpleasant odor is a warning to seek a purer atmosphere, surely it is worth while to cultivate that power which enables us to act up to that warning for the general benefit to health.—*Scientific American*.

DISCOVERY OF THE RUINS OF AN ANCIENT GRECIAN CITY.—The city was situated on the peninsula of the Crimea. Its ruins indicate its original opulence and splendor. Human skeletons and skeletons of horses have already been found. Near the site of the city are immense *tumuli*, or artificial mounds of earth, somewhat like those of the West of our own country. Their size and magnificence awaken amazement for the wealth and power of the people who constructed them. Tradition states that the tumuli were erected over the remains of the kings and rulers of this Greek colony. They are of all dimensions, ranging from ten to three hundred feet in circumference, and from five to one hundred and fifty feet in height. Specimens of the highest Grecian art have been found in them, such as sculptures, Etruscan vases, glass vessels remarkable for lightness, carved ivory, coins of the most perfect finish, and trinkets vying with the skill of the best modern workmen. One tumulus was so large that Dr. McPherson devoted two whole months to explore it. But the most astonishing monuments of early wealth are found on Mons Mithridates, the whole of which hill, from its base to its summit, and the space extending from it to the distance of *three miles*, are composed of broken pottery, and debris of the depth of from ten to even a hundred feet over the natural clay hill.—*Boston Journal*.

PICKRELL TOWN, Logan County, Ohio. }
February 1st, 1857. }

EDITOR OF JOURNAL.—In my school I have a class in Peterson's Familiar Science, and during a certain recitation a few weeks since, a visitor was present, and at the close of the recitation, he proposed the following questions:

In traveling over the Western prairies during the winter time, I notice that the surface of the earth cracks, forming rents (sometimes several inches in depth) in a manner generally observed in dry summer weather. What is the philosophical cause?

Again: The ice upon the surface of those lakes that become frozen over in winter time, often cracks, forming long and sometimes wide rents. What is the explanation of this phenomenon?

We gave what we thought to be the philosophical reason, but never having seen any scientific treatise explaining such phenomenon, of which I have any remembrance, I desire through the medium of the *Journal* a correct explanation.

Yours,

J. H. GREEN.

THE RIGHTS OF SCHOOL MASTERS AND PARENTS.—A case of considerable interest was tried recently before Justice Ladd, of Cambridge, Massachusetts. A citizen of Newton was complained of for an assault upon the master of a school of that place. It appeared that the master was in the habit, as is the general custom, of keeping the child of the defendant, with other scholars, after school hours to learn her lessons which had been imperfectly recited during school hours. The parent, believing that the detention was illegal, went to the school house and demanded his child. This was after regular school hours. The master said the child should go as soon as she had recited her lesson. The parent attempted to enter the school-room to take his child, but his entrance was resisted by the master, and the assault upon the master was the result. The Court ruled that the keeping of the child until the lessons of the day had been perfected was legal; that the parent in attempting to enter the school-room in opposition to the will of the master, was in the wrong; that a child placed at school by the parents, is under the control of the master until regularly dismissed; and that a parent can not withdraw the child from school during the day against the master's will, except through the intervention of an officer and the school committee. The defendant was fined twenty dollars and costs.

SLAVERY AND IGNORANCE.—Of white persons in Virginia, between the ages of five and twenty, there are 379,845. Of this number, there are at school or college only about 111,327, leaving as *attending no school of any kind*, 268,518: that is, for every young person in the State, between five and twenty years of age, receiving any instruction, there are two others who receive none! In other words, two-thirds of that portion of the population of Virginia who are to become citizens within the next fifteen years, are, in these most precious years of their history, going wholly untaught. We stop not to comment on the almost total worthlessness of much of the *instruction* imparted to the one-third who receive any.—*N. Y. Evangelist.*

There are, within the limits of the State of Maryland, according to the last census, seventeen thousand native white adults and three thousand four hundred and fifty-one foreigners, making in the aggregate 20,815 persons, who can neither read nor write. Scattered over eight counties of the State, with an aggregate population of about 80,000, there are but fourteen public schools, averaging about thirty-four pupils to each school. There are of course some private schools in these counties, but the entire number of children attending school, does not average more than one child to each family of seven persons.

The head of every third family throughout the State can neither read nor write. More than ten thousand men exercise the right of suffrage in Maryland, who are utterly unable to read the names of the candidates for whom they vote.—*Baltimore Patriot*.

GRADED SCHOOLS have just been established at Fort Wayne. Geo. A. Irvin, an experienced teacher, has been appointed Superintendent. Miss Lakin, recently of the High School at Richmond, and Miss Lora Mills, of Mooresville, Morgan county, are among the teachers employed there. A fine union school-house has been constructed with accommodations for three or four hundred pupils. The school commences under favorable auspices, and there is every prospect of its permanence and success.

Mr. S. Boyce, a gentleman who studied at the Universities of Berlin, Prague, and Vienna, will be connected with the School at Greenmount after the first of April next.

M. C. Stevens, of Greenmount, has accepted a situation in the Friends' School, Richmond, Ind. Salary \$900.

BOOK NOTICES.

NAYLOR'S SPEEDY CALCULATOR. This is a neat book containing 336 pages. This work contains many contractions that we have observed in no other. Every arithmetician would be improved by a perusal of it. It is published for the author by T. E. Chapman, No. 1 South Fifth street, Philadelphia. We are not aware that the book can be obtained in book-stores.

W. D. H.

We have received from the author, Mr. Elias Longley, of Cincinnati, a copy of his "Pronouncing Dictionary of Geographical and Personal Names." It is a most valuable work, and its price in boards, only 40 cts., puts it within reach of every one. See our advertisement of it on second page of cover.

"PARLOR DRAMAS, OR DRAMATIC SCENES FOR HOME AMUSEMENT," by Wm. B. Fowle, author of "The Hundred Dialogues." Published by Morris Cotton, Boston, Mass. We have only had time to read two or three of them, but from this hasty examination we judge the book well adapted to school exhibitions and, as the title announces, for "Home Amusements." Among the pieces we notice "Women's Rights," "The Pedant," "The Double Ghost"—all highly entertaining.

INDEPENDENT CLASS-READER. Published by James Robinson & Co., Boston, Mass. The finest literary taste is shown in the selection of pieces. In this respect we hardly know its equal. We have taken the liberty to extract one beautiful little piece, which may serve as a specimen of the sparkling gems with which it is filled.

LOVELL'S PROGRESSIVE READERS. Published by Durrie & Peck, New Haven, Connecticut. This is a series of four Readers, by an old and experienced teacher. It will bear favorable comparison with the various series which are now competing for public favor. Among the many embellishments in the books, is a picture of a beautiful cottage, which was purchased and presented to Mr. Lovell by those who were once his pupils.

Among our advertisements will be found "Butler's Common School Speaker," published by Morton & Griswold, Louisville, Ky.

This is an excellent selection of pieces for declamation, and is suited to the children of our younger grades of schools. In our opinion it may be made a profitable reading book also; as most of the text-books designed for our younger pupils are too dull and lifeless.

STILL ANOTHER.—We have on our table, also, "The Exhibition Speaker," containing farces, dialogues, and tableaux, with exercises for declamation in prose and verse, by P. A. Fitzgerald, to which is added a complete system of calisthenics and gymnastics. Price 87 cents. Address D. M. Dewey, Rochester, N. Y.

"COLTON'S CHARTS FOR PRIMARY SCHOOLS." We are so much pleased with these picture-maps that we have had a set of them placed in each of the primary and secondary schools in the city. They can be obtained of the Agent, E. S. Sherman, at Stewart & Bowen's, Indianapolis.

"WORCESTER'S QUARTO DICTIONARY," out at last. In common with many others we heartily welcome the appearance of this desirable work. In the "Dictionary War" which has been waged between Webster and Worcester, our own preferences have always been with the latter, but we have always felt that Worcester's series could not be complete without "a great Unabridged," which we are glad to see is "out at last." See advertisement.

We would call attention to the advertisement of Howe, of Cincinnati, for Agents, for the sale of his popular works. See second page of cover. Active Agents must find a ready sale for works of so popular a character as his. Among them is "Travels and Adventures of celebrated Travelers," a large illustrated work of over 800 pages.

Among our advertisements will be found that of McNally & Monteith's Series of Geographies, published by A. L. Barnes & Co. This Series has, we understand, been substituted for Cornell's, by the State Superintendent. We will express no opinion in regard to the rival series of Geographies, now competing for public favor, but there can be no doubt that the selection by the Superintendent is a good one. Copies of these Geographies for introduction, may be had by addressing Geo. A. Lawrence, General Agent, at Stewart & Bowen's, Indianapolis.

We publish in this number the list of delegates to the State Association. The amount of business to be transacted, the number and length of the lectures, gave to all our proceedings a degree of confusion and haste

which we hope future meetings will avoid. The published list will probably contain many inaccuracies, and many names are doubtless entirely omitted. We will not vouch for its accuracy in any respect.

LIST OF DELEGATES ATTENDING THE STATE TEACHERS' ASSOCIATION, AT INDIANAPOLIS, DECEMBER, 1856.

<i>Dearborn County.</i>		G. W. Bronson, Indianapolis,	
Thomas Olcott, Moore's Hill,		Samuel P. Lothrop, "	
George L. Curtis, "		Oliver Coggshall, "	
S. R. Adams, "		Miss Mary A. Vater, Indianapolis,	
John M. Olcott, Lawrenceburg.		Miss Susan Warner, "	
<i>Fayette County.</i>		Miss Sarah Warner, "	
Charles Daily, Orangeville,		Miss Mary Shellenberger, "	
Wm. Thrasher, "		Miss Martha Dewarr, "	
Robt. J. Gamble, "		Miss Georgiana Nichols, "	
Josiah Gamble, "		Miss Nellie Sprague, "	
<i>Floyd County.</i>		Miss M. J. Chamberlain, "	
H. B. Wilson, New Albany,		John Griffin, "	
J. G. May, "		J. B. Canfield, "	
W. W. M. May, "		T. A. Vaile, "	
Rev. B. F. Rawlins, New Albany,		George T. Houghton, "	
Mrs. S. M. May, "		O. H. Smith, "	
Miss M. Brandon, "		Thomas J. Vater, "	
Miss M. F. Wells, "		Miss Elizabeth A. Coburn, "	
A. J. Avery, "		Miss Ellen Cathcart, "	
<i>Henry County.</i>		Miss M. Chamberlain, "	
Isaac Kinley, New Castle.		Miss M. M. Marsee, "	
Elwood Macy, Raysville.		Miss E. Pierson, "	
Seth W. Pearson, Spiceland.		Miss Lizzie Kirlin, "	
<i>Boone County.</i>		Miss L. M. Higgins, "	
D. A. Willard, Thorntown.		Miss Sophia A. Haskett, "	
<i>De Kalb County.</i>		Miss Elizabeth Osborn, "	
Randall Farrok.		Miss Mary Roberts, "	
<i>Hendricks County.</i>		Miss Betty Bates, "	
R. C. Moore, Belleville.		Miss Mary Landis, "	
<i>Jefferson County.</i>		Mrs. S. C. Hall, "	
J. M. McLane, Madison,		Mrs. E. Longley, "	
Miss Eliza Guthrie, "		<i>Wayne County.</i>	
Miss Ellen M. Wright, Madison,		E. E. Edwards, Centreville,	
Miss Mary A. Brown, "		A. C. Shortridge, "	
Miss E. S. Tomlinson, "		S. R. Mitchell, "	
Wm. L. Githens, "		E. C. Thornton, New Garden,	
Andrew Dodds, "		R. S. Fisher, "	
Samuel H. Thomson, Hanover,		J. C. Stanley, Dublin.	
Wm. Bishop, "		W. S. Ballanger, Williamsburg,	
Jonathan Edwards, "		James W. Harris, "	
James S. Rankin, "		G. B. White, Jacksonsburg	
<i>Marion County.</i>		W. D. Henkle, Richmond,	
J. R. Challen, Indianapolis,		M. C. Stevens, "	
G. W. Hoss, "		J. Hurty, "	
A. R. Benton, "		Thomas Charles, "	
G. B. Stone, "		Matthew Charles, "	
T. J. Bryant, "		J. K. Cravens, "	
O. Phelps, "		L. A. Estis, "	

J. S. Wilson, Richmond,
 Joseph Moore, "
 Hiram Hadley, "
 Miss S. B. Alverson, Richmond,
 Miss C. Rogers, "
 Miss M. A. Vance, "
 Miss H. Birdsall, "
 Miss A. E. Moore, "
 Miss M. W. Brown, "
 Miss G. Lakin, "
 Miss E. Cox, "
 Miss A. Johnson, "
 Miss M. Johnson, "
 Miss Cynthia M. Bishop, "
 Miss Kate Truesdall, "
 Miss Alice Hurty, "
 Miss Lizzie Pool, "
 Milton Bond, Greensfork.

Putnam County.

J. W. Husher, Greencastle,
 G. A. Chase, "
 L. A. Lattimore, "
 D. Curry, "
 Miss R. C. Newman, "
 Miss E. A. Waterhouse, Greencastle,
 J. E. Chapin, "
 James Tingley, "
 William Hill, "
 Joseph Macker, "

Gibson County.

Henry T. Morton, Princeton,
 J. F. Bird, "
 Mrs. Martha W. Paxton, Princeton,
 Miss Martha S. Paxton, "

Vermillion County.

B. F. Rhoads,
 Hamilton Hays, Perrysville.

Randolph County.

W. L. Boyd, Winchester.

Laporte County.

Jasper Packard, Laporte,
 Mrs. R. M. Johnson, "
 C. C. Morrical, "

Rush County.

Daniel Clark, Carthage,
 Miss Martha A. Clark, Carthage,
 Miss Jemima D. Henley, "

Huntington County.

J. A. Merrill, Warren.

Delaware County.

Harrison Clarkson, Muncie.

Vanderburg County.

E. P. Cole, Evansville,
 B. P. Snow, "

Franklin County.

James A. Beswick, Brookville.

Hamilton County.

Nathan White, Carmel.
 J. T. Cox, Noblesville,
 Miss Harriet E. Bailey, Noblesville,
 Miss E. J. Thompson, "
 Miss Delilah Cottingham, "

Shelby County.

J. K. Moore, Shelbyville,
 Mrs. J. K. Moore, "
 Miss E. V. Beebe, "
 Miss M. Youcum, "
 Miss M. Rowell, "

Montgomery County.

E. O. Hovey, Crawfordsville,
 S. S. Thomson, "
 J. L. Campbell, "
 Miss Julia A. Clark, "
 J. M. Coyner, Waveland.

Jennings County.

L. J. Whitcomb, Tipton.
 M. J. Scott, jr., Vernon,
 T. C. Eddleman, "

Parke County.

B. C. Hobbs, Annapolis.
 Nathan Harvey, Howard.

Union County.

R. B. Abbott, Dunlapville.

Knox County.

R. M. Chapman, Vincennes,
 S. B. Allen, "

Morgan County.

James Pool, Mooresville,
 George Carter, "

Hancock County.

Miss Martha A. Rawles, Westland.

Tippecanoe County.

A. H. Clark, Lafayette,
 D. H. Roberts, "
 L. S. Kilborn, "
 E. W. Kinman, "
 Miss O. J. Hathaway, Lafayette,
 Miss L. F. Semans, "
 Miss Jennie Semans, "
 Miss Louisa Kulliner, "
 Miss F. Pettitt, "
 Miss Jane Minor, "
 A. J. Vawter, "
 P. C. Vawter, "
 R. T. Foster, Poolesville,

New York.

Alexander Wilder, 348 Broadway.

Ohio.

D. Eckley Hunter, Glendale.

Illinois.

A. D. Fillmore, Paris.
 D. Wilkins, Bloomington.

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REPORT OF THE ADDRESS OF COL. BRYANT, DELIVERED BEFORE THE STATE TEACHERS' ASSOCIATION, DECEMBER, 1856—BY A. WILDER.

It does not seem to strike the public mind that we have a class of public officers whose powers exceed those of any other of our political men, and whose influence will ever be on the increase. It does not matter so much who is our President or Governor. The people can correct these matters. But it is a matter of grave concern to whom we shall commit the instruction of the children of the nation. It is evidence of the little interest taken in the matter, that the pittance doled out to the teachers is deemed sufficient compensation. We have many friends of education. Just before election they are particularly numerous. The framers of the first constitution put it on record that the diffusion of intellectual culture was necessary to the support of freedom. But experience has shown that intellectual attainments alone are not sufficient for this purpose. A republican government is unfit for a vicious population. A military despotism only is fit for such people; and from this probably grew the old impression, that people are so prone to licentiousness that they require the check of a strong government. In our endeavor to provide the great essentials, we should employ the Bible as a school-book. He would look at this portion of the subject in a political point of view. We had only biennial sessions of the Legislature; yet though these were economical, the people were adopting the opinion that annual sessions were necessary. Their legislation was deemed imperfect. The Bible was not thus liable to objection. It was adapted to every state of society. This was particularly true of

the ten commandments. These protected man's person, property, and reputation. When the law forbade a higher offense, it comprised the lower—as that the law against slander forbade all tea-table gossip. With the law of the Bible, even biennial sessions of the Legislature would be found to be too often. Yet those who denied the inspiration of the Scriptures, insist that that law was of human origin, devised for a rude period of history, by men of strong intellectual discernment.

The Legislature of 1855, in re-organizing the State Prison, provided for the appointment of a Moral Instructor, to preach to convicts and give them suitable teaching. The reports of the Prison Discipline Society show that there is a striking proportion between crime and lack of moral cultivation. He had seen an instance of this:

A youth indicted for the larceny of a watch, was defended by himself. He interrogated the boy as to his history. The boy had lost his parents early, had not been at church or sabbath school, but had learned to read and write, and in a moment of temptation had committed the crime. He told this story in Court, and the judge, Wm. P. Bryant, had exercised the discretionary power granted him, by sentencing the prisoner to only one hour's imprisonment. The expense of our criminal trials annually is \$19,000,000—a sum sufficient to properly educate every child in the nation.

The cause of our Revolution was not to be traced to the tax on tea, or the Boston Post Bill, but to the principles of the reformation, propagated by Martin Luther. In that olden time, man feared to exercise his reason lest he should offend the God who gave it. Temporal banishment here and eternal misery hereafter was the penalty pronounced upon him. Deliverance came where least expected. It came from the ranks of the oppressors. Martin Luther, a monk, finds a Latin Bible in his convent. But he contemplated no revolution, and was driven into it by the violence of his adversaries. The people found that the infallibility of these rules might be questioned. The Bible, dragged from its prison-house, taught man that there was a limit to human authority. In England the king lent his aid to the movement, not from affection for its truths, but for purposes of his own. He desired not the liberty of his people, but to establish his own spiritual authority as Head of the Church, and even put forth a law entitled, "An act to do away with difference of religious opinions." A Bible

was put in every church, but the people were not allowed to have any discussion about it. The reign of Mary and Elizabeth did not prevent this discussion. The republican element was developed. The Puritans began to question whether the existence of an established church was necessary. Though many of their proceedings savored of gross fanaticism, yet we must respect their republicanism. Elizabeth once declared from her throne that while the papists were enemies of her person, the sectarians were opponents of her regal authority.

In Scotland, the reformation was conducted by the people without the aid of the government. The King, James VI, declared that a presbytery no more agreed with the crown than did God with the devil; to which the clergy replied that kings were the spawn of the devil.

Schools sprang up there under the care of the clergy. At length a school was planted in each precinct.

The Puritans of England soon showed that they could not submit to any act of arbitrary power. Many of them submitted to expatriation, and to them is due the establishment of those colonies, to which we owed so much. A Cromwell and a Milton remained behind; but even they *chose* to go with those who cursed the crown.

He was last winter at Washington, and had viewed the works of art at the Rotunda of the Capitol. There was De Soto discovering the valley of the Mississippi; the baptism of Pocahontas; the battle and surrender of Yorktown. But what impressed him more than all, was the picture of the embarkation of the Pilgrims on board the Mayflower. The attendant was voluble with explanations, but *he* felt it was profanity even to *whisper* in that presence. There the aged pastor was bowed in prayer. Miles Standish was clad in armor. The pilgrims were weeping as they went out bearing the precious seed. But they did not dream of the glorious harvest. They did not foresee that their posterity would dismember Europe.

For twenty years they did not elect a legislature. Power was vested in the male members of the church. Within thirty years after their settlement, they established a system of free schools. At this time they did not number 20,000. Their property did not equal what is now owned by many of our private citizens. Amid their poverty they stinted their pittance, they increased their schools, to give their children a free education.

There were others who landed in North America, who established colonies, but not with these grand results. They desolated the land and degraded humanity. Is it the Anglo-Saxon blood of which we boast so much, or the principles that our fathers entertained—that Bible—to which we owe so much. He held that no people can be ignorant where the Bible is free. We have seen civilization, refinement, and freedom follow in its pathway. Despots feel this, and impose obstacles to its authority.

Jesus Christ taught the equality of man. Our country has worked out the problem to its solution. Every nation has worked out its liberties with bloodshed. Despots know this, and interdict the use of the Bible. In some parts of this country it was considered necessary to place the Bible in prudent hands, particularly south of Mason and Dixon's line.

Let the Bible be thrown aside—let legislators decree that death is an eternal sleep—let its pure morality give place to the ethics of philosophers—and our government will fall. Where is the French Republic now? The Bible is the greatest safeguard against despotism on one hand and licentiousness on the other. Let us not follow the *ignes fatui*. Let us look to the Bible for our light; let it exert its benign influence in our homes and our schools, and then our country and institutions will be safe.

ART—ITS IMPORTANCE AS A BRANCH OF EDUCATION.

BY M. A. DWIGHT.

GEMS. The engraving of stones was an art of gradual growth, having for its first object, the purposes of economy and traffic; that of sealing stores and treasures as well as documents. At the same time, metal and wooden seals were used, with devices of little significance.

Many ancient signets were found in the form of cylinders, and were probably suspended about the person. As art progressed, signets were fashioned into rings, and worn upon the hand as an ornament, a custom which had its influence upon the dactylographist, who with this stimulus, attained a degree of skill in his own department proportioned to other branches of formative art.

The art of working in hard and precious stones advanced at a very early period, after the example of the Phœnicio-Babylonian stone cutters, from a rude incising of round holes, to the careful

engraving of entire figures in the even antique style. Of the Babylonian sculptures, but few remain ; therefore, little can be known of their style of art. According to Herodotus, every Babylonian had his signet; of these many are found, especially the cylinders in the neighborhood of Babylon, consisting of hard and precious stones, the chalcedony, hæmatite, and agate ; and although the use of these was transferred from the Chaldeans to the Magi, from the religion of Baal to the worship of Ormuzd, yet they might be understood and explained from Babylonian customs and usages. We can even yet recognize conjecturally, some of the chief deities of the Roman empire, which is however too little known to us to admit of detailed explanations. The workmanship of these cylinders is of various merit, often consisting almost entirely of round cavities, sometimes very careful and elegant. In design, the style corresponds very much with the monuments of Persepolis.

In the third period of art, the engravings of stones was so much improved, that the luxury of ring wearing raised the art of the dactyloglyphist to the greatest height that it was capable of attaining in proportion to other branches of the formative art, although the accounts of writers do not mention the names of any artists of this class, except that of Pyrgoteles, who engraved Alexander's signet ring. In gems also, we occasionally find a composition and treatment of forms corresponding to the Phidian sculptures; but works of this description, in which the spirit of the school of Praxiteles is manifested, are far more numerous.

In the fourth period, from the 111th to the 158th Olympiad, the luxury in engraved stones was carried to a still greater height, particularly from the custom derived from the East, and were chiefly maintained by the court of the Seleucidæ, of adorning cups, lamps, and other works in metal with gems. For this and other purposes, where the figure on the stone was merely for the purpose of ornament, and not to form impressions like a seal, the gems were cut in high relief, as cameos, for which variegated onyxes were preferred. To this class, belong the cups and goblets entirely composed of precious stones (onyx-vessels), which made their appearance at the same time. In this art were executed works wonderful for their beauty of design and technical perfection, particularly in the early stages of the period, when art was still animated by a higher spirit.

The work in precious stones is either *intaglio*, a depressed form, or *cameo*, a raised form. The principal object of the intaglio is, the impression ; that of cameo, ornament. For intaglios, transparent stones of uniform color were used ; also, spotted and clouded. Of precious stones, so called, scarcely any were used but the hyacinth and amethyst. Many, called half precious stones, were used, especially the numerous varieties of agates. Among these were the highly esteemed cornelian, the chalcedony, and the *plasma di emeraldo*. For the cameos, variegated stones were used, such as the onyxes, consisting of smoky brown and milk white layers, and the sardonyxes, which added a third layer of corne-

lian. These were also frequently produced by artifice, as well as similar kinds of stones, which oriental and African commerce brought to the ancients, of surprising and now unknown beauty and size.

Passing from the engraver's hands, stones designed for signet rings, went to the goldsmith who set them. The form of the sling was the favorite one. Although in the signet ring, the device was certainly the principal thing, the name is sometimes added; and here it must be assumed, that a name, which readily strikes the eye, must rather be referred to the possessor than to the artist of the gem. The fact that both states and individuals had seals, accounts for the great correspondence of many gems with coin-types; thus also the Roman emperors had seals with a head bearing their own likeness, with which coins were at the same time stamped. The frequent application of engraved stones to the decoration of drinking cups and other utensils (a practice derived from Byzantium by the Romans) was continued down to the middle ages. Even now, antique gems must sometimes be sought for in church vessels. In the engraved vessels formed entirely of gems, which are connected with the class of large cameos, many works, admirable for the extent and difficulty of the workmanship, have been preserved, although none of them belong to the time of a pure taste and a genuine Hellenic art.

As a substitute for the precious stone of the signet ring, glass was used among the less wealthy, and for that reason the imitation of gems and cameos in glass pastes was very widely diffused in antiquity, whereby many very interesting representations have been preserved to us in this class of monuments. According to Pliny, the glass was wrought in a three-fold manner; sometimes blown, sometimes turned, and sometimes engraved; the first and third process are also found united. Although perfectly pure and white glass was far from being unknown to the ancients, they every where manifested a preference for colored, especially purple, dark blue, and green, and for an iridescent splendor. They had also beautiful cups and goblets of colored glass, which were sometimes made of variegated glass, and sometimes ingeniously composed of glass and gold.

Among the ancients, the Egyptians, who made great use of the signet, even to the sealing of their sacrifices, practiced gem sculpture with great success, both in intaglio and in relief; but more particularly the former. Those preserved to our times are for the most part called *scarabaei*, from the figure resembling a beetle, and are of green jasper, cornelian, and chalcidony.

The Greeks, before the decline of their country, surpassed all others in the sculpturing of gems and precious stones. The same skill and taste that characterized their architecture and sculpture, is exhibited in all their arts, more particularly gem sculpture. Theodore of Samos, who engraved a lyre on an emerald belonging to the King Polycrates (556 B. C.), was one of their most famous engravers. In relation to this extraordinary gem, we have the

following anecdote: "Polycrates was remarkable for the good fortune which for a long period constantly attended him; so much so, that Amasis, king of Egypt, his friend and ally, advised him to break the course of it, by depriving himself of some one of his most valuable possessions. This advice was in accordance with the heathen belief, that a long career of uninterrupted felicity was sure to terminate in the greatest misery. Polycrates, having resolved to follow the counsel of Amasis, selected an emerald ring, which he was accustomed to use as a signet, and which he regarded as his rarest treasure, embarked on board a galley, and, when he had reached the open sea, consigned this ring to the waves. Strange to relate, about five or six days afterwards, while Polycrates was still grieving for the loss of this costly jewel, a fisherman brought to his place a large fish which he had caught, and on opening it, the lost ring was found. Polycrates informed Amasis, who immediately broke off his alliance with him, through fear of sharing the evil fortune with which he was certain that the ruler of Samos would be visited." The interest in this work has been newly revived by the announcement that "a vine dresser of Albano, near Rome, has found in a vineyard the celebrated ring of Polycrates. This treasure, the history of which is familiar to all readers of Schiller's ballads, was brought to Rome after the death of Polycrates, 522 years before Christ. It was seen also by Pliny, and mentioned by him. The Emperor Augustus placed it in a golden case, and for safety, deposited it in the Temple of Concord. The stone of the ring is of considerable size, and oblong in form. The engraving on it, by Theodore of Samos, the son of Telecles, is of extraordinary beauty. It represents a lyre with three bees flying about; below on the right, a dolphin; on the left, the head of a bull. The name of the engraver is inscribed in Greek characters. The upper surface of the stone is slightly concave, not highly polished, and one corner broken. It is said that the possessor of this ring has been offered \$50,000 for it (by a private individual), but has declined it, expecting to make a more profitable bargain with the Emperor Alexander."

This art was carried from Greece to Rome, where Dioscorides engraved the head of Augustus in so masterly a manner, that the succeeding Emperor advanced it to the honor of being the imperial signet. Among the later Emperors, the luxury of wearing gems about the person was carried to an extravagant height. Juvenal informs us, that there was a distinction between the weight of the summer and winter ring; and Martial wittily reminds a freedman, who indulged this folly to a ridiculous extent, that the size of his ring was better suited to his former condition than his present, resembling more the link of a fetter than a personal ornament. Heliogabalus was attacked by Lampridius for covering his shoes and stockings with engraved gems, as if the elaborate work of the gem sculptor could be admired when placed on the feet.

Important materials for the history of art are furnished by gems. Dioscorides, who engraved the head of Augustus which the Emperor himself used as a seal, was the most distinguished worker of the kind in intaglios. But the more important than the stones preserved under his name, is a series of cameos that represent the Italian and Claudian families at particular epochs; and besides the splendor of the material, and the dexterity in using it, they are in many other respects deserving of admiration. In all the principal works of the kind, the same custom prevails of representing those princes as divine beings presiding over the world with benignant sway, and as present manifestations of the most exalted deities. The designs are careful and full of expression, although they do not exhibit the spirited handling and noble forms which distinguish the gems of the Ptolemies; on the contrary, there is here, as well as in the reliefs of the triumphal arches, and many statues of emperors, a peculiarly Roman form of body introduced, which is distinguished from the Grecian by a certain heaviness.

The royal collection at Paris, and the British museum of London, contain numerous ancient engraved cornelians (which was the favorite stone for that purpose) of a fine description. Many of the latter were found in the field of Apulia, where Hannibal defeated the Romans so signally. Among them were many belonging to the higher classes, and Hannibal afterwards sent three bushels of rings to Carthage as a token of his victory.

The famous Portland vase was probably formed in the same manner as the glass imitations of gems. The figures upon it are of a white opaque glass, raised on a ground of deep blue glass, which appears black until placed against the light. The figures upon it are of exquisite workmanship, and antiquarians date its production several centuries before the Christian era, as sculpture unquestionably declined after Alexander the Great. It was long in the possession of the Barberini family, of whom it was purchased for one thousand guineas by the late Duke of Portland.

Mithridates, whose kingdom was the great mart of precious stones, had, according to Appian, three thousand cups of onyx with gold chasings. It is said, that Alexander the Great, in his eastern conquests, obtained immense treasures in cups and goblets, set with engraved gems. The noblest work of this kind now known, is the Gonzaga cameo, in the possession of the Russian Emperor, with the heads of Ptolemy, the second and the first Arsinoe. According to Visconti, it is nearly half a foot long. Winckelman has published an enumeration of some of the finest gems, and among them is an exquisite cameo of Perseus and Andromeda, in such high relief, that nearly all the contour of figures, in the most delicate white, are detached from the ground. It belonged to Mengs the painter, at whose death it was purchased by the Empress Catharine, of Russia, for three thousand Roman crowns; and if it were again thrown into market, probably none but those who hold royal treasures could compete for the possession of so great a treasure of art.

While learning how true artistic skill creates wealth, how these productions of nature taken in the rough state may be so enhanced in value by the skillful hand and cultivated taste of the artist, it may be asked, if making precious stones and precious metals still more precious, thus adding treasure to treasure, is all the ancient artists accomplished? By no means. They were the faithful and, for many successive periods, the only historians. Each one of every age contributed his part towards impressing upon the temples, tombs, and monuments the true and imperishable records of the religious worship, domestic habits, social customs, and historical events of his own nation in his own day; and it is to these records that the historians of the present time refer for information respecting the great nations of antiquity, that have either lost their own traditions, or have forever perished from off the face of the earth: nay, more—these same records, made by artists, including the orders of architecture, the peculiar forms of temples, the gems, coins, and medals, in their designs and styles of execution, plainly and unmistakably indicate the taste of a people, their progress in cultivation, their power and resources, and, at the same time, delineate the characteristic distinctions that so decidedly mark nationality, with a truthfulness and permanence that belong to no written records.

Antiquarians and learned men have in vain endeavored to decide in what country and among what people the arts first originated. The theory has been, that they had their beginning in some one nation from whom they were derived by others. Yet, the works of each differ decidedly in character. The Babylonian structures were of vast dimensions, but were not like the Egyptian pyramids, built to stand "till time shall be no more." The taste of the Phœnicians was for richness of color and ornament. The Chinese are sometimes curious and elaborate, and again, very simple and beautiful, exhibiting a variety among their works of art, that shows great power of invention. The Greeks, wherever they may have received their first ideas of art, cultivated it, as they did all other pursuits, on scientific principles. This enabled them to systemize the theory, and establish principles for the practice of the arts which are now considered the standard by all cultivated nations.—*Barnard's American Journal of Education.*

THRILLING INCIDENT IN THE LIFE OF AN INVENTOR.

Æolian Pianos.—A correspondent in the *National Intelligencer* (D. C.) notices the efforts that were made some years ago, by O. M. Coleman, the inventor of the "Æolian Attachment," to direct attention to it among the musical circles of London, and concludes with the following anecdote:

"But to bring my letter to a close. After Coleman had obtained his European patents, and his invention had attained the highest point in the estimation of the public, he still found a 'lion in the way.' The celebrated Thalberg, then and yet justly regarded as the first pianist in the world, who was then on the Continent, had not yet seen or heard the instrument. Many eminent musicians, and especially the piano manufacturers, stood aloof until Thalberg should give his opinion. Coleman felt that the fate of his invention hung upon the fiat of the dreaded Thalberg. It was—'Wait till Thalberg comes,' and, 'If Thalberg says so and so, then,' &c., until the very name of Thalberg became hateful. The great master arrived in London at last, and a day was appointed for his examination of the instrument. A large room was selected, into which were admitted a number of the first musical artists.

"Benedict sat down and played in his best style. Thalberg stood at a distance, with his arms folded and back turned. He listened for a time in that position, and then turned his face toward the instrument. He moved softly across the floor, until he stood by the side of Benedict, where he again stopped and listened. An occasional nod of the head was all the emotion he betrayed. Suddenly, while Benedict was in the very midst of a splendid sonata, he laid his hand upon his arm, and, with a not very gentle push, said, 'Get off that stool!' Seating himself, he dashed out in his inimitable style, and continued to play for some time without interruption, electrifying Coleman and the other auditors by an entirely new application of the invention. Suddenly he stopped, and turning to Benedict, requested him to get a certain piece of Beethoven's from the library. This was done, and Thalberg played it through. Then, striking his instrument with his hand, and pointing to the music, he said: '*This* is the very instrument Beethoven had in his mind when he wrote that piece. *It has never been played before!*'

"The next day Coleman sold his patent right for a sum that enabled him to take his place among millionaires."

TRUMAN H. SAFFORD—THE MATHEMATICAL GENIUS.

BY J. N. TERWILLIGER.

Young Safford is the most remarkable mathematical prodigy that has yet appeared. Ten years ago, when much "sensational" was created among those who read the accounts of his wonderful and unprecedented intellectual feats, the writer was led to preserve some of the most interesting paragraphs that appeared in our pa-

pers and periodicals, relative to him, and from them the following feats and incidents are condensed, in the author's language. Before, however, giving a brief biographical sketch of this interesting boy, it must be remarked, that the impulse to prepare this paper was imparted to me by accidentally reading the following paragraph, in a letter to the Secretary of War, by the Superintendent of the Nautical Almanac: (See Messages and Documents, 1855-6, Part 3.)

"The distribution, which is nearly the same as last year, is as follows: Mr. Safford on the Lunar Distances, Mr. Loomis on the Moon, Culminating Stars, and also in assisting Mr. Safford in copying for the press," &c. The young man who, ten years ago, was considered a prodigy, has beautifully illustrated the saying, "the child is father to the man." Now he is employed by the United States Government in doing work equally difficult with that assigned the three most eminent mathematicians of the age—Runkle, Loomis, and Pierce. Pierce, by common consent, stands at the head of living mathematicians, and young Runkle is now employed in the re-examination and verification of Prof. Pierce's theory of Neptune. But, promising to evade all episodes in the rest of this paper, I proceed, briefly, to give the promised sketch.

Young Safford was born at Royalton, Windsor county, Vermont, January 6th, 1836. He seems to inherit his mathematical talent from his father. When only ten months old, he seemed anxious to know the relations of cause and effect, and always asked the reasons of things.

In his third year, he said one day, to his mother, "If I knew the number of rods around father's big meadow, I could tell how many barley corns it is." His father told him it was 1,040 rods, when the boy promptly said, "it is 617,760 barley corns." Before his eighth year he was equal to Zerah Colburn. At this time he obtained some knowledge of algebra and geometry, and besides having great power to multiply, divide, &c., for which Colburn and Baxton were so noted, he had a taste and a talent for the solution of abstract problems, requiring the highest analysis. In 1845, in his ninth year, he prepared and published his first almanac, the astronomical calculations of which he made himself. In 1846, he calculated four different almanac calendars—one for Cincinnati, one for Philadelphia, one for Boston, and one for his native Vermont. At the same time that he performed this labor, he originated new formula for getting moon risings and settings, ac-

accompanied by a table, shortening Newton's method one-fourth. His rule, with others of a similar kind, for calculating eclipses, is preserved, with a copy of his almanac, in the library of Harvard University. Mathematicians say his rule for calculating eclipses shortens the work one-third. He excels equally in history, languages, and all the sciences. At twelve years old, he was pretty familiar with the contents of his father's library, consisting of about 600 volumes. He reads books like no other student; he opens a volume in the middle, last part, or first part, and in a few hours is familiar with the matter of an ordinary volume. This reminds one of the facility with which young Newton read Euclid. He is known to have merely *perused* this volume of the celebrated Greek geometer, and, though but a boy, to have arisen from that brief perusal master of the "Elements." He said, "Every thing is plain, self-evident, in Euclid."

Young Safford is now at Harvard University, and has been there for several years. Mr. Everett, the literary savan and linguist, and Prof. Pierce (who has had to make out all the more difficult parts of the U. S. Coast Survey Reports for several years) being his teachers.

PHONETICS IN PRIMARY SCHOOLS.

In the February number of the *Journal*, we gave a report of a lecture on Phonetics, by Prof. Bishop, of Hanover, delivered before the State Association. This was not the subject which the Association expected him to discuss, and many felt disappointed in respect to it. The question, whether Phonetics can be made useful in teaching children to read common English, had been reported upon and discussed at the meeting at Madison, Dec., 1855, and the subject was there referred to a committee for a future report, and for further discussion. In this light Phonetics is a matter of interest to very many teachers. Experiment only will settle this point, and it is of sufficient importance to demand a fair, impartial trial. We do not intend to defend Phonetics in general, nor does our limited experience enable us to furnish any conclusive evidence of the advantages which it furnishes in teaching children to read. It certainly possesses some degree of merit, and thus far the experiment we are trying in the schools of this

city is successful. In September last, we employed Mrs. Longley, of Cincinnati, to take charge of one of our primary schools, in order to test the merits of Phonetics in learning to read. The experiment has been confined to those who had not yet learned their letters. At the semi-annual examination a few weeks since, those who had been taught on this plan were able to read well in phonetic print. This reading was not confined to short simple words like those in our primers and first reading books, but was similar to the reading in children's story books. Some of the older ones in the class could read phonetic print quite readily with only three months study. This term these phonetic pupils will make the transition to common print. If at the end of the year they can read in reading suited to the comprehension of children of their age, we shall be satisfied with the result. This the advocates of the system claim that it can do, and surely no person will say that children of ordinary intelligence attain this in so short a time by any other system—least of all by the usual method of teaching the alphabet first. Usually two or three years are employed in acquiring this power—not unfrequently three or four years and even more. We will not speculate upon the result of this trial. The *alphabetical* and the *word* method are also being tested under competent and faithful teachers, and the results of each at the end of the year can be fairly and fully compared. We were sorry to see any attempt to excite ridicule against this subject; still this will not deter teachers from investigating, although it may throw obstacles in their way, by exciting opposition from parents. One thing was especially marked in the examination of the phonetic classes here: the clearness of enunciation, and the consequent training to which the vocal organs are subjected. This we are aware can be obtained by other methods, but by *this* it can not be avoided, and this alone furnishes a strong argument in its favor. The objection which is most frequently urged against the use of this method, is the difficulty of making the transition from phonetic to common print. In answer to this, its friends claim that one who reads the phonetic print readily, finds not much more difficulty in reading common print, than one familiar with common print finds in reading phonetic. If this is true, and impartial experiment will decide it, there is no reason why it should not be unanimously adopted in teaching children to read. We should be pleased to have teachers and superintendents of schools satisfy themselves by personal observation of the experiment now being tried here, in reference

to the claim which this system has upon their attention. There is nothing difficult in it. Any teacher can in a few hours become qualified to adopt it, and while our profession ought not to make itself obnoxious to the charge of seeking after new things, it is unworthy of us to oppose anything which claims to be an improvement, without first having fairly examined it. At the close of our present school year, in June next, we shall refer to this subject again, and will then give the result of our own experience. We shall also be pleased to hear from any teachers who have seen the system tested, for we doubt not that it will be interesting to every reader of the *Journal*.

THE INFANT MIND.

BY J. P.

We have often thought that if any man in the world needs to be a philosopher, that man is the teacher. He whose only province it is to deal with mind should endeavor, within the limits of possibility, to penetrate its measureless depths. No man so much as he, has occasion for a thorough acquaintance with intellectual philosophy, so far as that science is yet understood; and who has greater inducements than he, successfully to push inquiry beyond the present limits of known truth? Much as has been ascertained in reference to the nature and powers of the mind as it exists in the adult human being, the precise state in which it exists in the infant, and the modes and stages of its early development, are very imperfectly understood. Conjecture has indeed been busy, but observation has not been directed with sufficient discrimination, constancy, and patience to determine what is the exact character of the child's first intellectual processes, and how nature, the only perfect teacher, commences the work of his education. The most profound and practical treatise on the philosophy of the human mind has yet to be written, and when it appears, the darkness which enshrouds this most interesting stage in the progress of a human soul will be cleared away; and then the well-trained teacher, knowing how nature has *begun* the work of developing the child's faculties and informing his mind, will know precisely how to take it up and assist in carrying it forward.

By whom and when this work will be written, we know not, but it will be done. The requisite knowledge is *possible*, because it is *desirable*, and might be rendered so eminently useful.

Meanwhile, any discussions in this direction, may be interesting and instructive. Our attention was attracted, a number of years since, to a statement in Bossut's First French Grammar, as to the

order in which the child naturally learns the words belonging to the different parts of speech—a statement which we have since seen copied into other works, or at least into one other, and the truth of which may be easily tested. Bossut says the words first employed by the child are interjections, or words expressive of simple pleasure or pain, as *oh ! eh ! la !* The next are nouns, as *papa, mamma, dog, cat*, or the names of such persons or things as he sees the oftenest. But the infant soon begins to use other words, as *run, eat, drink, walk, laugh, cry*, expressive of motion or action, which we denominate verbs. Very soon he has occasion to express the sense which different nouns convey to his mind ; as *hot fire, kind mamma, good papa, sweet sugar*, and here the adjective is introduced. The next effort of the child to express himself to others, is to qualify the verb or action by adverbs, and to say man runs *fast*, mamma comes *soon*, stroke puss *softly*.

The child soon after has occasion to describe the position of nouns in regard to each other ; as *to papa, from mamma, with nurse, behind the door*, and so he comes to use the preposition. To avoid the too frequent repetition of nouns in speaking, the child soon begins to employ the pronoun, and says, instead of *brother hurts Alfred*, he hurts me. The child will now be able to express himself on all subjects, and the two parts of speech not yet mentioned are refinements and not common to language in a rude state. The article serves to determine, for instance, whether we speak of a particular man or of man in general. The conjunction is used in formal discourse, to indicate the connection of sentences, which are joined together ; and the acquirement and judicious use of this part of speech is the last thing attained in the study of language.

Some time after becoming acquainted with the statement of Bossut, and before having instituted any test, another work, manifesting much ability in many respects, came under our notice, in which it was asserted that the child learns, after interjections of course, first nouns, then adjectives, then verbs ; instead of in the order of nouns, verbs, adjectives. A subsequent observation, in a particular instance, has sustained the statement of Bossut ; but whether the order is in every instance the same we have not the data on which to predicate any assertion.

A considerable series of observations can alone determine that point. Is not this a matter of sufficient interest not to say amusement, to enlist the attention of the enquiring mind ?

We found our own observations exceedingly interesting, and were often amused to notice, how, with a skillful use of inflections, the child of active mind, who, beyond exclamations of feeling, has command only of *nouns*, will yet manage to make little narrations which are perfectly intelligible. For instance, I heard a father on one occasion ask his child if he should take the basket, and go to the store, to buy some apples for her. She replied, "Yes," and then ran off to tell her mother ; "Ma, Pa—basket—store—apples—sissy."

That the operations of the youthful mind at this and subsequent stages is worthy of attention, and often very diverting by the display of shrewdness which it exhibits, no one, who is conversant with the infant department of the Knickerbocker, will deny. An instance in point recently occurred in this city, and was noticed in the Newark Daily Advertiser: A little girl, not three years of age, while her father was engaged in family prayer, becoming no doubt weary at the length of the exercise, and happily recollecting how it always terminated, suddenly shouted out "Amen." After waiting a moment or two, and observing that this proved ineffectual, she repeated with more emphasis "Amen." By this time a smile was creeping over her father's countenance, and noticing that he hesitated a little, and betrayed a manifest effort to proceed with his devotion, she pleasantly added: "Pa, can't you say it?"

In a school, in which we were formerly engaged, a little boy, five years of age, was placed under our care, whose mind was so exceedingly active, that we found no possible way of keeping him out of perpetual mischief, except by keeping him always at our side. When we went into another room to hear a recitation, he went with us. We soon observed that not a single word was dropped in the recitation, whatever the subject, which he did not notice, and many were the shrewd remarks which he would, from time to time, make. In a geography recitation, on one occasion, he listened very attentively to an account of the earthquake which occurred at Caraccas in the year 1812, by which an immense number of houses were thrown down and ten thousand people destroyed. No sooner was the recital ended than he briskly stepped out in front of us and looking up into our face with great earnestness, said, "Mr. P——, I know what made those houses fall down." "You do," replied we, in a tone of surprise which was unaffected, "What *was* the reason?" "Why, the fact of the business is," said he, "they were not put up as they ought to have been. It is just as grandfather says: he says people don't half build their houses now-a-days. If those houses had been built as they should have been they would never have tumbled down in that way."—*N. Y. Teacher.*

INFLUENCE OF THE TEACHER.—It is not so much the amount of knowledge bestowed, as the tone of thought given to the mind by the living teacher, and the direction given to the workings, that is after all the great point in an education. One deep, clear, strong, healthy mind will, as the instructor of youth, leave a mark upon his age, second to none. Thomas Arnold, of Rugby, England, has revolutionized the public school education of that country. So, too, Dr. Wayland, of Brown University, has left his mark upon this country and upon its thinking men, that will lead some of them far beyond anything that he has himself attained.

A man may write his name in marble, or build it in the solid granite, but how soon will it all crumble before the tooth of time. How melancholy to go into what were the fashionable houses of a generation ago. The guests all gone, the banquet halls deserted, the property in strange hands, and put to uses never dreamed of. But he who embarks his capital, whether of time or money, in bestowing the most valuable knowledge he can confer on the youth of his country, writes his name with a pen of iron in the living rock, or rather in the living hearts of all generations. Socrates has not left a line of his own writing, but he taught a few men to think and to write, and thus his thoughts bless the world still, and all the wise bless the discriminating wisdom, of his mind.—*Phil. Ledger.*

SCIENTIFIC ITEMS.

William C. Redfield, of New York, died February 11, 1857, after a short illness. He was born in Connecticut in 1789.

Mr. Redfield was distinguished among scientific men for his laborious investigations in reference to storms. He, together with Col. Reid, Governor of the Bermudas, Prof. Dive of Berlin, and others, advocated the gyratory motion of hurricanes, while Prof. Espy, usually called "the storm king," contends that *the wind blows from every quarter towards the centre of the storm.*

This same J. P. Espy published, a little more than a month ago, a letter in the National Intelligencer, in which he complains that Lient. Maury, in his article on the storm of January 18th, makes no mention of his investigation. Espy says, "It is but just that my labor should not be entirely ignored, more especially by a man who is under the same department of Government as myself."

ALUMINUM.—For several years great expectations have been entertained that this new metal would take the place of silver as "the metal of domestic elegance." It is now stated that although *aluminum* does not blacken as silver does by exposure to sulphurous exhalation, yet it tarnishes by exposure to moisture, and is damaged by contact with warm water. It is also said to resemble zinc in color more than silver, and therefore we may conclude that aluminium spoons, forks, &c., will never supplant those made of silver. The cost of aluminium is at present one-third that of

silver, and hopes are entertained that its cost will hereafter be much reduced. As a bell metal it is said to be unsurpassed by any other metal or combination of metals.

SANDY HOOK.—The coast survey has brought to light the fact that this peninsula is gradually increasing to the northward into the main ship-channel. It has increased a mile and a quarter within a century, and at the rate of one-sixteenth of a mile per year, on an average, for the last twelve years. Prof. Bache says, the cause of its growth is the conflict of two northwardly currents outside and inside of the Hook.

JOHN CHAPPELLSMITH, in an article in the January number of *Silliman's Journal*, takes the position that the characteristic action of the barometer during the passing of a revolving storm, such as a hurricane or tornado, is a *small rise and not a great fall*. The basis of this position is founded on observations made upon a tornado near New Harmony in this State, which occurred April 30, 1852. He considers that the observations are at variance with the views of both Redfield and Espy, so far as they advocate their respective theories on the ground that there is a considerable depression of the mercury in the barometer on the approach of the axial area of a whirlwind.

VOLTAIC PILE.—The theory of the voltaic pile is now considered as settled. Research for the last thirty years has at one time favored the *chemical*, and at another, the *contact* theory. In a work on electricity by Dr. La Rive, it is shown that *chemical action* is the only source of electricity.

ARITHMOMETER.—We have seen quotations from the *Independence Belge* and the *Paris Moniteur*, which give an account of the invention of a *calculating machine* by M. Thomas, of Colmar, after thirty years hard study.

It is said to perform with infallible correctness the operations in the four rules, viz.: addition, subtraction, multiplication, and division, besides being applicable to involution, evolution, &c. The *Moniteur* speaks in extravagant terms of its capability, when it says, "It serves as a complete substitute for human intelligence in the combination of figures." If this is literally true, we ought to expect that, if we should lock up one of these machines in a room with an arithmetic, it would "cipher it through." The *Independence Belge* says, "It is already in operation in several great commercial houses, the house of Rothschild, and in the mint

of France, and it will soon be as common as letter-presses." It is said to be so small that it can be put in a light box that can be carried in a pocket. How large the pocket has to be is not stated. It multiplies eight figures by eight others in eighteen seconds, divides sixteen figures by eight figures in twenty-four seconds, and extracts the square root of sixteen figures in one and one-fourth minutes. Many other marvelous things are said about it, but we forbear to mention them. We hope our correspondents will each get one, and then, *perhaps*, we can get rapid solutions of such problems as the famous No. 18. W. D. H.

EXTRACT FROM REPORT OF COMMISSIONER ALLYN
ON ABSENCE AND TRUANCY.

A child permitted to be entirely absent from school not only loses advantages which, if improved, might make him happy and useful to the society in which he lives; he contracts a distaste for application, and learns to love ignorance and stupidity. He becomes yearly less and less inclined to any intellectual effort, and more and more ready to be made the dupe of the designing, the tool of the demagogue, the instrument of fanaticism and discord. And furthermore, he is in increasing danger of becoming idle and reckless, and consequently vicious and destructive. Having no ability to read and thus beguile his hours of leisure in the pleasing task of self-instruction, he is likely to be a wanderer from his home at nightfall, and therefore a fit and easy prey to every selfish and criminal propensity of his own nature or of his neighbor.

These are the evils—described in short, and imperfectly—of entire absence from schools. The evils springing from only partial absence or irregular attendance at school are in many respects kindred to them. But it should be here remarked, that as all vices have a tendency to produce results apparently greater than we can reasonably expect, while virtues strangely seem to produce less striking effects than reason would lead us to anticipate, so the evil effects of a few absences from school or of small irregularities in attendance will of course always be greater than their apparent insignificance would warrant us to look for. We must in this place take an account of the loss of time—whether the child is employed in work or otherwise—of the derelish of mental appli-

cation contracted during that absence, and, in consequence of it, of the fearful proclivity of vice and crime, stimulated if not produced in the absentee's nature by his neglect of privileges; and in addition to all these—necessary results of any amount of irregular attendance—we must look at the effect produced upon those who are not absent. For in this world we are all so closely connected one with another, that no one of us can sin or neglect duty, or fail to improve, without inflicting a serious injury on our fellows.

If four children from a class of sixteen—which is about the ratio of absenteeism among those who are enrolled on the school registers—are absent every day, there is, besides the loss of just one-fourth of the teacher's time, and the school expenses, a fearful drawback on the industry and progress of the scholars who are present. Of the twelve present to-day, four, that is one-third, were absent yesterday, and having not heard that lesson recited and explained, they are not fitted to understand the present lesson. The teacher must therefore go over it rapidly to them, and this will cause a loss of time to the other eight, and being done rapidly will not be fully understood by the four absentees. Here then are three losses—no one of which is inconsiderable—the time and strength of the teacher—the time and patience of the scholars who were punctual—and the loss to the absentees themselves—resulting from the imperfect understanding of the previous lesson, and all these are additional to those enumerated above. As this twenty-five per cent. is the constant ratio of absenteeism, these losses are every-day losses, and their amount, in a year, is fearful.

The effect of these is to introduce discouragement into the breast of the faithful and courageous teacher, and confusion and loss of interest into all the classes and exercises of his school.

Thus it appears that the child, whoever he may be, that is enrolled on the register of the public school, and then is often absent, not only squanders his own precious time, but does actually retard the intellectual progress of the whole school; and is therefore, in truth, depriving others of the power to reap their full due share of the liberal provision which the State makes for the education of all its sons and daughters. And the parent or guardian who demands or expects that the Commonwealth shall assist him in the noble work of education is, if he allows or commands this absence, defrauding the child, wasting the money of the public treasury, and placing obstacles in the way of each of his neighbors and

their children, to hinder them from the full enjoyment of one of their natural and just rights. Ought this to be submitted to with patience? Has not the body politic a right to demand that these causes of hindrances to the profitable use of the treasures devoted to public instruction be removed? There can be in the mind of any far-seeing philanthropist and statesman, no question as to this right. And as to the duty of enforcing it by all suitable means, there must be quite as little question.—*R. I. Schoolmaster.*

MATHEMATICAL DEPARTMENT.

W. D. HENKLE, Editor.

SOLUTION OF No. 28.—By S. B. ALLEN.

Since the shares are equal to each other, it is evident that $\frac{1}{9}$ of the first remainder is the \$100 plus $\frac{1}{9}$ of the second remainder; and that $\frac{1}{9}$ of each remainder is \$100 more than $\frac{1}{9}$ of the one following it. The last remainder must be nothing, and its $\frac{1}{9}$ leaves \$900 as the share of the last child, which is also the share of the others. Then since the first receives \$100 plus $\frac{1}{9}$ of the remainder, \$800 is the $\frac{1}{9}$ of the remainder; and $\$800 \div \frac{1}{9} = \$8,100$, is the whole estate, whence 9 is the number of children.

[This problem was solved by *O. A. Brownson, T. Coggeshall, J. Pool, R. M. Cameron, R. W. McFarland, and Jacob Staff*. The solutions were all different, that by *Cameron* being the briefest.]

SOLUTION OF No. 29.—By W. T. STOTT.

First, fill the three quart cup; second, empty this into the five quart cup; third, fill the three quart cup again; fourth, from this fill the five quart cup, and there will be one quart in the three quart cup; 5th, pour this into the eight quart cup; now fill the three quart cup.

[This solution supposes, as was allowable, that the wine was originally in a fourth vessel, whose capacity may be considered either as known or unknown. This problem was solved by *W.*

S. Benham, J. Pool, T. Charles, T. Coggeshall, R. M. Cameron, Kenneth Wharry, S. B. Allen, O. A. Brownson, R. W. McFarland, and M. C. Stevens.]

ACKNOWLEDGMENTS.—*J. K. Cravens, Betty Hosbrook, R. M. Cameron, O. A. Brownson, R. W. McFarland, and M. C. Stevens* solved Prof. Hess's problem. A problem just like this is solved in Robinson's Geometry. *Jacob Staff* solved No. 23, and *G. W. Bassett*, No. 27.

SOLUTION OF No. 21.—By E. M. STRIBBLING.

After sending *R. W. McFarland's* solution we received the following from Mr. Stribbling:

"The hyperbola will solve No. 21, by drawing a tangent to the circle at the extremity of the diameter, and within the angle thus formed describing any number of rectangles—the given area; the tangent and diameter will be the asymptotes." See Loomis's *Analyt. Geo.*, p. 97.

[This is a beautiful theoretical solution of this problem. Instead of saying "describing any number of rectangles—the given area," it would be better to say, describe with the lines above referred to, as asymptotes, an equatorial hyperbola whose semi-axis is equal to the diagonal of a square that is equal to the given area. It is evident that when the problem is possible, the hyperbola will cut the circle in two points, thus giving two solutions.—ED.]

SOLUTION OF No. 18.—By H. N. ROBINSON.

Let the quantity of grass which is on one acre at the commencement be taken as the *unit of measure*, and g be the growth on one acre in one hour, or in the *unit of time*. Then $3\frac{1}{2}g$ will be the growth on $3\frac{1}{2}$ acres in one hour, and $4 \cdot 3\frac{1}{2}g$ will be the growth on $3\frac{1}{2}$ acres in 4 hours. The mowers will cut but *half* the growth of the grass. This conclusion can be shown by the following reasoning: Suppose a company of mowers are 16 days mowing a field of grass, the grass growing all the while. Take into consideration two square rods, which they cut on the mowing of the third day. These rods have had the growth of two days only. Suppose they cut two other square rods on the mowing of the 14th day. (two days from the close). These last two square rods have had the growth of 14 days.

Rods.	Days.	Rod.	Days.
2	2	=1	4
2	14	=1	28
		=1	32 days, or 2 rods, 16 days,

or 4 rods, 8 days. That is, the number of square rods, 4, must be multiplied by half the whole number of days, 8.

Applying this principle to the problem, we get $(3\frac{1}{2}+7g)$ for the amount mowed by the first company of mowers, $(10+45g)$ for the amount mowed by the second company, and $(24+24.9g)$ for the amount mowed by the third company. Let x =the required number of men. Now 12 men in 4 hours will mow the same as 48 men in 1 hour; 21 men in 9 hours, the same as 21.9 men in 1 hour; and x men in 18 hours, the same as $18x$ men in 1 hour. Whence we obtain the following proportions:

$$48 : (3\frac{1}{2}+7g) :: 21.9 : (10+45g) \quad (1)$$

$$48 : (3\frac{1}{2}+7g) :: 18x : (24+24.9g) \quad (2)$$

From (1) we obtain $g=\frac{12\frac{1}{2}}{45}$ which value being substituted in (2) gives $x=37\frac{27}{50}$ the same as when the mowers are considered as taking off the whole growth of grass.

This is an unexpected result, but so it is, if I have made no numerical blunder.

We can have a true and consistent problem in supposing the grass to wither as well as to grow, and that view first presented itself to me as the one intended, as the time was *so short*—only a few hours. In that case g must be taken with the *minus* sign. With this view I get $x=12\frac{3}{4}$.

[We have not observed any "numerical blunder" in Prof. Robinson's figuring. If there is none we presume that the answer above given is viewed by him as correct. His mode of solution is very nice considering that he is right in saying, that "the mowers will cut but *half* the growth of the grass." Our opinion, however, is, that this is not a fact. The reason of this opinion will be given in the next number, along with what we consider a correct solution, which results in 35.96—or nearly 36 men as the number sought.—ED.]

PROBLEM No. 35.—BY JACOB STAFF.

A well 30 feet deep contains 18 feet of water, which is to be drawn out by a man at the top who, the first hour, takes out 4 feet. How long with a uniform effort will it require to empty the well?

[This is a fine problem for solution by calculus. It can also be solved very beautifully by arithmetic. We hope those who understand calculus, will send calculus solutions, and those who do not, arithmetical solutions.—Ed.]

PROBLEM No. 36.—By JACOB STAFF.

A and B set out for the same place in the same direction. A travels uniformly 18 miles per day, and after 9 days, turns and goes back as far as B has traveled in those 9 days; he then turns again, and, pursuing his journey, overtakes B, $22\frac{1}{2}$ days from the time they first set out. It is required to find the rate at which B uniformly traveled.

A mental solution is requested.

[Will J. Q. Adams inform the editor whether he can solve the problem sent, or whether he sent it to frighten our correspondents? —Ed.]

EDITORIAL MISCELLANY.

DEAR JOURNAL:—Leaving Putnam county, from which I last addressed you, I visited Vanderburgh. Evansville, the county seat of this county, is beautifully situated on the Ohio River, nearly seventy feet above low water. The course of the river causes the town to assume the shape of a crescent. Population, including Lamasco, about fifteen thousand, and very rapidly increasing, so that it is destined soon to become the second, if not the first city in importance in this State. A most flattering account might be given of its commercial prosperity, and the increase of its business, but this would not come within the scope of my design; and might not interest your readers. I shall speak of the educational condition and prospects only. Less than three years since, Evansville possessed not a building bearing the name of school-house. The basements of churches, and the upper rooms of engine houses, and also private dwellings constituted the only building appliances for school purposes. From such a beginning, if beginning it can be called, Evansville took a new start, and went vigorously to work, until she has educational facilities which will not be disparaged by a comparison with those of any other place in Indiana. The school building is beyond comparison the best in the State. It is of brick, seventy-five feet in length by fifty-seven in breadth, three stories in height, covered with slate, and possessing the late improvements in furniture, warming, and ventilation. There is also in the building a small but

choice selection of Philosophical and Chemical apparatus, amounting to \$300 in value; and a Geological Cabinet, a donation from Dr. Owen. The school numbers nearly eight hundred pupils, and is regularly graded from Primary to High School. The whole is under the superintendence of Mr. B. P. Snow, an accomplished and successful teacher, aided by the following subordinate teachers: Messrs. Knight and Adams, and Misses Fisher, Ronalds, Clarke, Hooker, Kellogg, Hoff, O'Byrne, Hayden, and Riley. Mr. Snow has also the immediate charge of the High School.

Evansville is justly proud of her schools, and they are cherished with a feeling which might well be imitated in many other places in Indiana. Though burdened with very heavy taxes, she cheerfully pays the amount necessary to maintain her schools free; and when men are proposed for municipal officers, they are required to pledge themselves to the hearty support of these her dearest interests. From her present auspices, beginning with an intelligent and efficient Board of Education, a corps of well trained and energetic teachers, and with liberal patrons, Evansville may justly expect to reach the full realization of her anticipations.

Evansville possesses the best reading-room in the State, and in connection with it a fine library of some two thousand volumes; the whole the property of the Evansville Library Association. The County Library is about as large, and possesses a reserve fund of some \$3,000. We have likewise a McClure Library.

Lamasco, Evansville's immediate neighbor, has, from several causes, not done so much for her educational interests. But there is at present a very good prospect that she will emulate and even rival her elder sister. She has good schools in operation, but her chief difficulty arises from her want of suitable buildings. Her schools are under the charge of Mr. O. A. Brownson, a thorough scholar and popular teacher, aided by four subordinate teachers. From the beginning already made, her School Board are promising a bright future, and are zealously laboring to produce such a result.

The children in these two cities have, during the last year, read from the Township Library nearly *seven thousand volumes*, largely surpassing any other township in the State.

The schools in the rural districts in Vanderburgh, like those in other parts of the State, greatly need improvement; and we fear this improvement will come but slowly. There is much opposition to the School Law, but most of it is the result of ignorance and prejudice.

Your readers will please pardon me for devoting so large a space to a single county. I thought it was demanded. Evansville is located in what is familiarly known as the "Pocket"—sometimes called the "Egypt" of the State; and if there is any incident of extreme ignorance or ludicrousness manufactured to create a laugh, it is invariably located in the "Pocket." A distinguished educator, in a public address, stated, in speaking of what he deemed one great darkness, that the "sun did not rise in the Pocket until three o'clock in the afternoon." Now, as we

annually contribute several hundred dollars to educate the children of our more enlightened (?) neighbors, if the rest of our State persist in calling our region the "Egypt" of Indiana, we shall certainly insist that they recognize Evansville as the "Goshen" of that land.

Truly, &c.,

E. P. C.

REPORTS.—We have received the report of the Sup't of Public Instruction of Louisiana. In the 57 parishes of the State, there are 73,322 children between the ages of six and sixteen. Less than half of these have received education in the public schools during the past year. The amount appropriated by the State, was four dollars for every child between the ages above mentioned, a sum hardly sufficient in the thinly settled parishes to support even the semblance of a school for more than two or three months in the year. It is now ten years since the Free School law was enacted by Louisiana, but from the insufficiency of the means provided, but little progress has been made, and very little interest is felt in public education, in a large part of the State. New Orleans, Carrollton city, and a few other places, are honorable exceptions to this.

Speaking of the small amount which is appropriated to the support of schools, the Superintendent very justly remarks:

"It is certainly as preposterous to expect to put into successful operation a system of Public Schools, without ample means, as it would be to attempt internal improvements. If private schools must have from three to four dollars per month from each scholar, can we expect to obtain good teachers in our Public Schools for four dollars per year for each child? Or is it less arduous to conduct a public than a private school? or are we to say, by our actions, that the Public Schools do not need as competent teachers as private schools?"

Like most other Southern documents, it shows extreme sensitiveness in regard to slavery. The education of free negroes must be prevented by law, and Yankee spelling books and primers must be banished from the State as incendiary and dangerous. In reference to the latter point the Report says:

"In this connection, I must urge the necessity of fostering 'SOUTHERN INSTITUTIONS.' It has become an imperative duty for the South not only to educate her children at home, but from books entirely free from all sectional bias, such as is often to be found in primary works. It need not be said they cannot be had: only create the demand, and forthwith it will be supplied. Already we find works intended for and suitable to SOUTHERN SCHOOLS, before the public, and it would be derogatory to the South to say, she could not supply herself with suitable 'school-books.'"

But great as would be the injury arising from the use of Northern textbooks, it sinks into insignificance in comparison with what would result from the education of the free blacks.

"While the importance of liberally educating the rising generation can not be too '*strenuously urged*,' there is a practice in portions of our State, the deleterious effects of which will fall upon us like a simoom, and result in greater devastation than the fell pestilence which often throws a gloom over our people. It is the practice of '*educating free negroes*.'"

We are not disposed to question the wisdom of the Superintendent. We only think he does not go far enough. As Horace Mann said, "Slavery and Free Schools are antagonistic." One can not exist where the other does. It will be of little use to protect the institution by such feeble barriers as those proposed in the Report. Banish Free Schools, or they will banish slavery.

NEW ALBANY, 1857.

MR. EDITOR:—Please write an article for the *Journal* on "redeeming the time." Many teachers waste their time during school hours by tardiness in getting their pupils seated, and busy at the opening of school, and also in calling and dismissing classes. Some do this and are not aware of it.

A CALCULATION.

Lost at opening in the morning,	- - - - -	5 minutes.
Lost at opening in the afternoon,	- - - - -	5 "
Lost in calling and dismissing seven classes, three minutes each,	- - - - -	21 "
Total in one day,	- - - - -	31 "
In one week,	- - - - -	155 "
In forty-two weeks,	- - - - -	6,510 "
Or 108½ hours, or 18 days of 6 hours each. Nearly one month lost in a school year.		

L. S. Kilborn writes us, that quite a large number of the teachers and friends of education of Montgomery county, met at the Centre School House in Crawfordsville, Friday, January 16, to organize a County Association.

After this had been effected, various lectures and reports were given, and some very good resolutions passed. The use of Tobacco was strongly condemned, and if all the teachers of Montgomery county carry into effect the very courteous resolution in regard to the *Indiana School Journal*, they will find an article in the February number on the use of the "weed" which will justify them in their utter condemnation of it. An attempt was made to have the meetings monthly, but an adjournment was finally made to April 10th. Place of meeting, Crawfordsville. Officers of the Association: President, Prof. J. L. Campbell; Vice Presidents, Miss Lina Johnson, Prof. A. M. Hadley; Secretary, L. S. Kilborn; Treasurer, G. M. Smith.

Correction.—Mr. L. Boyce in the last *Journal*, page 61, should be Mr. L. Royce.

COMMON SCHOOL FUND OF INDIANA, ACCORDING TO THE ACT OF MARCH 5, 1855.

- 1.—The sum of ten cents on each one hundred dollars of the list of property taxable for State purposes.
- 2.—The Surplus Revenue Fund.
- 3.—All funds heretofore appropriated to Common Schools.
- 4.—The Saline Fund.
- 5.—The Bank Tax Fund.
- 6.—The funds derived from the sale of County Seminaries.
- 7.—All funds derived from fines and forfeitures, on account of breaches of the penal laws of the State.
- 8.—All funds derived from estates which shall escheat to the State for want of heirs or kindred entitled to such property.
- 9.—All funds derived from the proceeds and sales of all lands which have been, or may hereafter be, granted to the State, where none other purpose is expressed in the grant.
- 10.—The proceeds of the sales of the swamp lands granted to the State of Indiana, by the act of Congress of September 28, 1850, after deducting the expense of selecting and draining the same.
- 11.—The taxes which may from time to time be assessed upon the property of corporations, for Common School purposes.
- 12.—The funds arising from the 14th section of the charter of the State Bank of Indiana.
- 13.—All unreclaimed fees as provided by law.

O. H. Smith, jr., who has recently left Indianapolis to connect himself with the Academy at Manchester, Dearborn county, writes us that their school commences under favorable auspices. "The building just completed is the best arranged house for school purposes I have ever seen. The people are wide awake to their educational interests, and feel determined not to be excelled by any other place in the State." We can not agree with Mr. Smith in thinking that Manchester is properly aroused, till there are graded schools, supported through the entire year at public expense, affording instruction to every one of her children. Till that time, success to the Manchester Academy, and to the partial efforts which are now being made for education there.

PLEDGES FOR THE SCHOOL JOURNAL.—We call upon those teachers who made pledges at the meeting at Indianapolis for the support of the *School Journal*, to make up their lists of subscribers. From a few who thus pledged themselves, we have not as yet received a single name, while several counties are already up to the mark. No time so easy to obtain subscribers as at the beginning of the volume. Fellow teachers, remember we have our agency to sustain, and we must have a large subscription. Do not let the burden fall too heavily on a few. Any teacher can, by a little effort, obtain subscribers. In many places of considerable size we

have but two or three subscribers. In many counties only one or two townships are represented on our subscription books; while in Wayne county we send the *Journal* to nearly every post-office. It ought—it might with a little effort on the part of local teachers, be done in every county. To every teacher who may read this, let us say, Will you do your part? We are not in the habit of making constant appeals to teachers, as our readers well know, but we are now near the beginning of this volume, and what is to be done should be done soon.

Rev. L. Tarr writes us that our list of delegates printed in the February number does injustice to "the State of Boone," there being at least *three* from Thorntown alone. Our list gives but *one*. We presume there are also other errors, which we shall be pleased to correct. We like to know the names of those teachers who attend Associations, and we here give as additional representatives from Boone county—

Rev. L. Tarr, Thorntown.

Miss S. A. Perry, "

We should also like to see Boone more fully represented on the subscription books of the *Journal*. We shall look to Mr. Tarr, who has already done some service in this direction, to see that this matter is properly attended to.

A little girl who was accustomed to hear a blessing asked when she sat down to meals, was taken to visit a family where a keen appetite was usually thought a sufficient preparation for the duties of the table. At tea time she waited to hear the usual petition, but as it was not forthcoming, she supplied its place by an original version of her own, thus: "For gracious sake, Amen." The effect may be imagined, for it was very solemnly said, with her head bowed and hands clasped.

The Annual Report of the Common Schools of Cincinnati is received, for which we are much obliged. It is a valuable document, and in our next number we will give some statistics of schools and school matters in the "Queen City of the West."

Rev. Charles Elliott, D. D., late editor of the Western Christian Advocate, has accepted a Professorship in Iowa University.

Miss M. W. Brown, late of the Richmond High School, is now a teacher in Indianapolis.

OUR EXCHANGES.

We have for some time been intending to notice our exchanges, but from various reasons too numerous to mention, it has been delayed.

We propose to overhaul at least a portion of the pigeon holes where these birds literary in more senses than one (so feminines who invade our sanctum say) are wont to roost.

And first let us glance at the "Youth's Department." "Grace Greenwood's Little Pilgrim," is one of the best papers for children we have ever seen, beautifully illustrated and filled with interesting stories. Whoever has seen the interest with which children read "Grace Greenwood's Recollections of her Childhood," or "History of my Pets," will need no other evidence that "The Little Pilgrim" is just what will amuse and instruct the little ones.

Terms 50 cents per year. Address L. K. Lippincott, Philadelphia.

"The Student and Schoolmate," for which we have received some seventy-five subscriptions in this State, within the last two months, is also an excellent periodical for juveniles. It is published both at New York and Boston, and we shall be happy at any time to receive subscriptions for it. It is furnished at one dollar per year, but to clubs of 15 or more, it can be sent for 66 $\frac{2}{3}$ cents apiece. Many teachers have formed such clubs in their schools. It is very easily done. And the influence of such a periodical will be beneficial to your pupils. Try it, teachers, and see. We shall be pleased to receive and forward any subscriptions, either single or in clubs. Do not imagine from this that it is a matter of pecuniary profit to us. We work in this matter, be it known, for the cause of education *generally*, and the *Hoosier Journal particularly*, which periodical, you fellow teachers have as much interest in as we have. In other words we have a commission, but the proceeds thereof are devoted wholly to sustaining the *Journal* and the Teachers' Agency.

Still another on our list is, "The School Fellow," published by Dix, Edwards & Co., 321 Broadway, New York, which is finely illustrated, and in reading matter compares well with those mentioned above. Price 10 cts. per copy.

Passing to weightier matters, we will call attention to "The American Journal of Education and College Review," published at New York, by Calkins & Stiles, and edited by Absalom Peters, D. D., Samuel Randall, and Alexander Wilder, recently of the New York Teacher. Mr. Wilder was present at our Annual meeting in December last, and received a goodly number of subscribers, although how he could have obtained them is a matter of curiosity to those who saw the demure and somewhat *long* favored individual who occupied our reporter's desk during the whole session. He certainly could have had little opportunity to practice the insinuating arts of the agent, and whether subscribers were attracted by his personal appearance, to which Hovey, of the Illinois Teacher, pays a somewhat doubtful compliment, or by the intrinsic merit of the work, we can not say. But as a man's literary character is of more consequence than his personal appearance, we are inclined to give Mr. Wilder the benefit of the doubt, and suppose, not knowing to the contrary, that every one of the subscriptions were obtained upon the real solid basis, that the College Review is one of the *very best* educational periodicals in the whole world. In this country indeed it has but one competitor. That is "Barnard's American Journal of Education." Both these Journals we prize highly,

and from both of them we have enriched the pages of our own *Journal*. Each is published at three dollars a year. Barnard's, quarterly, at Hartford, Connecticut; the other, monthly, at New York.

BOOK NOTICES.

THE LAWS OF HEALTH, by William A. Alcott, M. D., from John P. Jewett & Co., Boston; Sheldon, Blakeman & Co., New York.

This is a first rate philosophy. It has none of the dry, hard technicality of a text-book, but is very interesting as a book for general reading, while at the same time it is prepared with questions to adapt it to the recitation room.

THE AMERICAN EDUCATIONAL YEAR-BOOK. An almanac comprising Educational Statistics, Teachers' Directory, published by James Robinson & Co., 119 Washington street, Boston. Price 25 cents.

This work is necessarily somewhat incomplete, as it is the first attempt of the kind. It is well worth the money however, and every teacher should have it. The publishers will, we presume, be able to give us a much more complete work next year.

THE AMERICAN ALMANAC. A work which for years we have thought we could not do without, containing more useful information than almost any work we know of. We have first the calendar and celestial phenomena for 1857. The Executive Government of the United States, Officers of the Departments, Postmasters, Army and Navy lists, the Marine Corps, the Judiciary, time of holding the Courts, Ministers to Foreign Countries, Revenue and Expenditures, Exports and Imports, the Commercial Marine, List of United States Colleges, Theological Schools, Congress, List of Senators and Representatives, the Executive and Judiciary of each State, Salaries thereof, &c., comprising a mass of information which every teacher, business man, or indeed any intelligent man, can not afford to be without. Crosby & Nichols, Publishers, Boston, Mass.

MAYHEW'S UNIVERSAL EDUCATION, by A. S. Barnes & Co., New York. A work which most teachers are too well acquainted with to need an especial notice. It is a standard work for a teacher's library.

SMITH'S JUVENILE DEFINER, also by Barnes & Co. A valuable little work, containing a list of the names of familiar objects, and the words relating thereto. This book has been added to the list recommended by the State Board.

MORALS FOR THE YOUTH. A little moral philosophy, by Emma Willard, is published by the same house.

We are in the receipt of several other works, but have not time to notice them now.

TEACHERS' DIRECTORY.

Miss Martha W. Brown, Indianapolis, Ind.
Miss H. E. Bailey, Noblesville, Hamilton county, Ind.
Miss Margaret Bolles, Delphi, Carrol county, Ind.
B. J. Beal, Noblesville, Hamilton county, Ind.
S. L. Binkley, Bloomington, Ind.
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Mrs. Jane Cowen, Warsaw, Kosciusko county, Ind.
Miss Semiramis Cowen, Warsaw, Kosciusko county, Ind.
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Mrs. J. Vigus, Logansport, Cass county, Ind.
H. T. Waterman, Sharpsville, Tipton county, Ind.
Geo. W. Weyburn, Goshen, Elkhart county, Ind.
Wm. C. Wilkes, Monroe county, Georgia.
Miffin C. Williams, Pickrell Town, Logan county, O.

THE
Indiana School Journal.

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EXTRACT FROM AN ADDRESS BEFORE THE STATE
TEACHERS' ASSOCIATION, AT LAFAYETTE, AUG.,
1856—BY J. A. McLANE.

But we come now more immediately to the history of that class of institutions whose prominent characteristics it is our business more particularly to describe. The Institute, as such, is of American origin, and hence commends itself to our fullest sympathy, and deserves our utmost co-operation.

Going back to the first association of teachers formed in the United States, so far as we have any information, we find it at Middletown, Connecticut, formed in 1798, under the name of the "School Association for Middlesex County." Its objects, as set forth in a circular, in 1799, were "to promote a systematic course of instruction, and elevate the character and qualifications of teachers." But the progress of correct institutions, together with the truth upon which they are founded, is often slow indeed. So it was here.

Coming down through a period of more than a quarter of a century, we find the first body of teachers assembled for the purpose of being taught how to teach, convened in Hartford, Connecticut, and continuing in session for four weeks, receiving the instruction and enjoying the pleasures afforded in such a class. In the year 1839, the Hon. Henry Barnard, then Secretary of the Board of Commissioners of Common Schools, for that State, at his own expense, convened a "Teachers'" or "Normal" Class, in order "to show the practicability of making some provision for the better qualification of common school teachers, by giving them an opportunity to revise and extend their knowledge of the studies

usually pursued in district schools, and of the best methods of school arrangements, instruction, and government under the recitations and lectures of experienced and well-known teachers and educators." Here then may be dated the origin of this important educational agency, at least the first real approximation to it—since to Mr. Barnard belongs the honor of having embodied in this practical form, the idea of the professional education of the teacher.

Here a great step was taken in the march of educational improvement; but still another was to be made before the crowning instrumentality in the promotion of popular instruction would be reached. This was made in 1842, in New York, and completed in the following year. In the fall of 1842, Mr. James S. Denman, the efficient and intelligent Superintendent of Schools for Tompkins county, recommended to the teachers of that county to form an "Institute." In accordance with this suggestion, in the month of April, 1843, one hundred teachers assembled to engage in the exercises and share the benefits resulting from this kind of association. Here, then, belongs the credit of reviving the Teachers' Institute, of fully appreciating its privileges, and giving the popular name by which it is now every where recognized and known.

Its progress now began to be somewhat commensurate with its merits. A light seemed suddenly to shine into the public mind, as when the sun peers forth in his brightness from behind a cloud which has for a time obscured his rays. It rapidly spread from State to State, until it is now found side by side with the common school in every State which enjoys the priceless privilege and blessing of a system of public instruction.

Tracing its history still farther, we find the State of Rhode Island the first to recognize the Institutes in her school system, while Massachusetts took the lead in granting them legislative aid, thereby securing their formation and maintenance by liberal endowment. Subsequently she also incorporated them into her school system. At present, however, New Hampshire is doing more than any other State for the encouragement of Institutes, and there, as they should every where else, they are producing most beneficial effects upon the common schools. The Superintendent of Common Schools in Connecticut, in a report to the Legislature of that State in 1855, comparing it with New Hampshire, says, "In the State of New Hampshire, with a population

considerably less than our own, and with far less taxable property, the sum of \$5,200 is annually devoted to the support of Teachers' Institutes."

No doubt deeply impressed with the conviction that in these, has been found an instrumentality capable of being wielded with powerful effect for the advancement of common school education, these with other States, and Ohio among the rest, have contributed the influence afforded by legislative enactment, and the bestowment of public funds, to give life and vital energy to an enterprise so pregnant with great and glorious consequences for good. May Indiana, roused to a full appreciation of all that pertains to the successful issue of the enterprises sacred to the cause of education, in which she has embarked, soon follow her sisters, the older States, in sustaining these enterprises by liberal provision from her public treasures for the endowment of the Teachers' Institute in every county within her borders.

In the preceding account of the origin and history of the Institute, its nature has been briefly shadowed forth; but this, which now claims our attention more particularly, from its importance, demands a more clear and full exposition. The nature of the Institute is necessarily such as admirably fits it for use in every possible variety of circumstances in which it may be held. Is there one locality which more than another, within the limits to which it is supposed to belong, needs the regenerating, vivifying influences which it can always be made to yield? It is taken there. Is there one season which is more convenient than another for its sessions? It is held then. Do circumstances require that only a short time be spent? The exercises are adapted to this time. Do they admit a much longer time? The exercises are arranged accordingly. A more full and critical examination of the branches to be reviewed is undertaken; a more exact representation of methods is given; a more thorough discussion of theories is permitted; a more free interchange of opinions is indulged; more acquaintances are made, more friendship enjoyed, more sympathies enlisted, more enthusiasm enkindled, more difficulties removed, and a stronger determination instilled, than ever before existed, to persevere in the labors and duties of the teacher's great work until success shall crown his efforts, and consciousness of duty well performed shall bestow her rich reward. Does the degree of advancement of those in attendance permit the introduction of fundamental branches only? Then these only

are introduced. But have the pupils already passed the threshold and gone within the portals of science? Then higher branches can be introduced, and higher still, until the whole circle of science and knowledge has been thoroughly analyzed and understood, and the pupils come forth possessed with varied and valuable acquisitions, and fitted in a high degree to assume the education of those youth who are so soon to take their place in the various stations and arduous duties of life. But let it be constantly kept in mind that a complete training in the branches of study to be taught in the Common Schools, can not be given in one week, nor in two, nor yet in four. Teachers' Institutes are not established with reference to such a design. Their object is rather to give to the whole body of teachers a new impulse to improvement; to direct their attention to the importance of ascertaining the best methods of instruction; to lead them, through the influence of eminent and experienced teachers, to task their own invention, judgment, and skill to the utmost, for perfecting themselves in the art of teaching. Much instruction is indeed incidentally given. Improved processes of training the mind and of teaching the elements of knowledge are exhibited; new notions concerning the methods of instruction are suggested, and greater skill in their prosecution imparted. But what is even of still more value, a generous emulation is excited, and a new impulse, in the right direction, given to a large body of teachers at every Institute held. It is thus in its nature animating in a high degree, infusing activity and energy and ennobling aspirations through all its course. And, surely, when, by such an agency, the whole community shall be systematically reached, a spirit of improvement will be infused into the mass of the teachers, which can not fail to produce highly favorable results. The ulterior object, then, to which all other things are made subservient, is to awaken a glowing enthusiasm for self-improvement. The tone and spirit of an Institute is, therefore, a matter of much greater moment than the amount of time given to a mere review of the studies.

The spirit of the Institute is finely expressed in a remark made by De Fellenberg to a visitor to whom he was showing the Institution founded by himself at Hofroyl, Switzerland, and over which he presided. Pointing to perhaps a hundred men, who, in a large, open building erected in a recess of one of the gardens, appeared to be engaged like boys in a school-room, he said, "But here is the engine upon which I rely for effecting the moral regen-

eration of my country ; these are the masters of village schools, come here to imbibe my principles, and to perfect themselves in their duty." So the Institute is the engine by which to elevate the common school, the teacher, the world.

Of the abundant testimony which might be adduced in confirmation of the nature of the Institute as already described, we must be content with presenting only that found in the Annual Report for 1849, of the Secretary of the Board of Education for Massachusetts. "Institutes," he says, "perform the office of light armed troops, and by the celerity of their movements accomplish much that lies beyond the reach of the Normal School. They interfere neither with the Normal School nor with Teachers' Associations, but constitute an important connecting link between them, and thus complete a well arranged system of organizations. While these associations answer all the ends of similar associations among other professions, securing the pleasures of intercourse, the benefits of sympathy, and the information derived from mutual conference, discussions, and lectures, the Institutes are, during the day, Normal Schools in miniature, and, at evening, popular meetings for enlisting the community at large in the work of education."

"MESSRS. EDITORS:—As I am a teacher, and also a subscriber for the "Massachusetts Teacher," I take the liberty to say a few words and to ask a few questions.

"I notice that in nearly all the counsel, admonition, and good advice that teachers receive at conventions, institutes, and educational lectures, moral instruction is considered of the highest importance. I suppose, (judging from the earnestness with which it is urged upon our regard,) it should be the ultimatum of a teacher's earthly bliss. That moral instruction should be given no teacher doubts, much as he may doubt his ability to give it properly and successfully.

"But how? and when? are with me questions of the greatest import. If the school is opened by reading the Scriptures, and the reading is followed by a prayer, and the teacher earnestly endeavors to conduct himself according to the precept of those Scriptures, and in the spirit of the prayer, through the day, does he do enough of that kind of teaching denominated Moral Instruction?

"I should say, such a course is not moral *training*; and, if I understand what I read, something more is supposed to be necessary than the reading of a chapter in the Testament once a day, and a morning petition, though these, to be sure, are appropriate and of good report. Now the question with me is, "What is it that needs to be done, and how is it to be accomplished?" Accomplished lecturers may talk, and elegant writers may pour forth their beautiful effusions, but unless they can give us some hint of the *modus operandi*, some idea of the course to be pursued, their elegant talk is *practically* wind. Every one who has taught three months knows that beautiful theories do not always work well in the daily practice of the school-room.

"Give me the man that can tell *what* to do, rather than one who can only say *something* ought to be done. I can not wait till every town in the State is ready to furnish 'uncovered school-rooms' to teach good morals in. What am I to do in this department to-morrow, and the next day, and every day? Let those who have been successful with any plan of moral instruction give us the result of their experience, and, above all, the manner of operating. Can you put a pupil through a course of morals, as you would teach him the science of arithmetic? I have a few pupils who learn arithmetic slowly enough; possibly if I had a course of morals to administer to them, they might *take* to that, and yet live to be great moral lights.

"I have a school in the suburbs, numbering from fifty to sixty pupils, whose ages vary from five to sixteen years. Consequently I have two or three distinct offices to sustain: first, I am a primary school teacher, and as such I should be endowed with all patience, wisdom, skill, gentleness, and forbearance; second, I am teacher of my intermediate department, a place second in importance only to the station of primary teacher; and lastly, I have a class that would stand high in any grammar school. I will not weary your patience by attempting to portray, or enumerate even, all the difficulties of the situation. It is sufficient to say that time passes swiftly in school, if not always pleasantly. My pupils are from all grades of society. Some are under the best parental influence, while others are taught to swear, and allowed to lie, and permitted to steal by their parents. They never swear in *my* hearing, and seldom lie to *me*, but that they do such things no one acquainted with the character of some of their parents will have the hardihood to doubt. Now,

Messrs. Editors, if you have any recipe by which I can correct all these faults, and restrain these vices, and cause these youths to grow up respectable men and women, truthful, honest, reverent, and cultivated, please to send it forth to the teachers of the land, and you will thereby confer an unmeasured benefit on many who are striving to do something to civilize the youth in common schools."

Yours, very respectfully,

Ido.

—*Mass. Teacher.*

THE FIFTH ANNUAL REPORT OF THE SUPERINTENDENT OF INSTRUCTION, AND LEWIS BOLLMAN, AGRICULTURAL EDITOR OF THE INDIANA STATE JOURNAL.

MR. EDITOR:—My attention has been called to an article in the "Indiana State Journal" of the 19th ult., purporting to be a review of the Fifth Annual Report of the Superintendent of Instruction, by Lewis Bollman, Agricultural Editor of said "State Journal."

As this is the second attack, made by this same Editor, it may, perhaps, deserve a passing notice.

It is not easy to see the precise motive influencing Mr. Lewis Bollman to make an assault so uncalled for, so rude, upon Mr. Mills. The animus of the piece savors strongly of political rancor; but, as there can be no conceivable reasons for such a course, the cause must be sought for in feelings of another character. It may be, that he is seeking notoriety, and desires to invite public attention to himself by thus wantonly assailing a man of acknowledged merit—standing high above him in literary reputation, and still higher in the estimation of the people. Or, it may be, that he has arrived at the conclusion, that the Department of Public Instruction is merely an adjunct of his own; and therefore, that all the acts and even the language of the Superintendent of said Department, legitimately pass under his supervision, and are the proper objects of his animadversion. This last motive is suggested by the fact, that his production is over his official signature. This was entirely unnecessary. The article might have as well appeared anonymously. Its idiosyncrasies most unmistakably point to its author. No one would have mistaken it as having proceeded from the Senior Editor, who is con-

ceded to be not only an accurate writer, but likewise one of the best belles-lettre scholars in the State. But, whatever may have been the motive, the article in question is not only ungenerous, but is also untruthful, and even scurrilous.

Mr. Bollman states, that he found the same faults in style in Mr. Mills' Fourth Annual Report; and that he then pointed them out. So, it seems that Mr. Mills, like all reprobates, has neither repented nor reformed, which has so aroused the indignation of this Editor, that he actually neglects the imperishable interests of Agriculture for a whole day, that he may give vent to his feelings.

Literary criticism comes, too, with but a poor grace from Mr. Bollman. His own perversions of "pure English undefiled" are, at times, sufficiently ludicrous; and would provoke mirthfulness, even among a class of tyros in Rhetoric. This deficiency may be his misfortune, rather than his fault; for, in speaking of the very small amount of reading done in Monroe county, where he has long resided, and where, for aught we know, he was born and raised, he says there were, during the past year, *seventeen* readers of the county library, and *six* of the McClure. If this, then, is the true way to account for his errors in style, we tender him, in view of his great lack of early educational advantages, our warmest sympathies.

He finds great fault with Mr. Mills, because his style is too figurative; and introduces a long quotation from the Report, in which the Superintendent draws some of his illustrations from a railroad — a very common occurrence among speakers and writers in this age of steam. It is perfectly legitimate to infer, that had the illustrations been drawn from a hydraulic ram, or a patent reaper — being entirely within the pervue of Mr. Bollman's profession — they would have been properly appreciated by him, and thus would not have become obnoxious to his criticism.

Again, he complains, that the Superintendent is repetitious. This may, perhaps, be true in some degree; and is a result of Mr. Mills's enthusiasm in the cause of Education. Ardent himself in the enterprise to which he has devoted the entire energies of nearly thirty years of his life, and anxious that others should see the subject as he does, he naturally holds it up in every possible light of which it is capable. Hence the seeming repetitions, which are so offensive to the Agricultural Editor.

In reference to what he terms the great obscurities in style, it

may be suggested, that he professes to understand them himself; and it is presumable, that if *Mr. Bollman* can clearly comprehend the language, it will not likely be unintelligible to *any one else*.

The following quotation from the review needs no reply. It will be taken at its par value by an intelligent community:

"The only certain impression such sentences can leave upon the mind is, that Education can not confer common sense, where nature has denied it."

After condemning Mr. Mills for what he is pleased to term "his improper appeals to the selfishness of the people," he proceeds to question his integrity in saying that "he has heard but one expression of opinion from all parts of the commonwealth; and that is in favor of a tax sufficient to keep the schools open six months during the year." In reply to the above quotation from the Report, Mr. Bollman remarks, that "this declaration of the Superintendent shows how little credit is to be given to his declarations; that they represent more his own, than the people's opinions."

Now, I do not know what were Mr. Bollman's antecedents, neither am I quite sure that a man's occupation always influences his thoughts and his language. But, if such is really the case, it would seem that his business must have formerly been the same as that of the *prodigal son of old*.

Mr. Mills professes to give that expression of opinion only, which has reached *his ears*: and this Editor forfeits the title of a gentleman by charging him with mendacity in the premises. His reference to the fact, that the last Legislature rejected all measures to increase the efficiency of the School System, is not conclusive. Mr. Bollman ought to know that legislators do not always reflect the opinions of their constituents.

His contemptuous sneers at Mr. Mills for his recommendations of District Superintendents, Normal Schools, &c., are the results of his pitiable ignorance. He has never been craned up to Mr. Mills's position in the Educational field; and can not be expected with *his* narrow horizon to take in the extended range embraced by the Superintendent's eye.

He finally finds something in the Report, which meets his approbation; and condescends to speak most patronizingly. This is more intensely provoking — considering the source — than the attack itself; and most beautifully exhibits the gentleman's self-complacency.

Mr. Mills needs no eulogy at my hands. His efforts in the cause of Education are too well known, and too highly appreciated by the people of Indiana, to require a labored defense. He has stood for years in the very front ranks of our advocates of free schools. He has had more to do than any other man in moulding our Educational institutions; and if he has not met his own anticipations and those of the friends of the cause, it is only because he has not found the materials sufficiently plastic — because he has been thwarted both in the Legislature and out of it, by men of caliber too small to perceive his efforts, and hearts too cold to appreciate them.

I desire that I may not be misunderstood in this matter. In animadverting upon Mr. Bollman's indefensible assault upon Mr. Mills, I have no reproaches for the profession to which he belongs — that of farming. So far from having the least disposition to speak disparagingly of it, I esteem it one of the noblest and most useful of all human employments, though it is quite questionable whether Mr. Bollman is materially furthering the cause by the effusions of his pen; and it is respectfully suggested, whether he would not more effectually subserve the interests of Agriculture by returning to the cultivation of turnips and cabbages, devoting, in the mean time, as much of his leisure as possible, to a careful perusal of the county and McClure libraries of Monroe county. If, however, he *must* write, let him confine himself to that field of labor in which he is specially employed; and not seek to invade a department for which neither native talent, nor acquired knowledge, has furnished him the least qualification.

B.

NOTICE OF "ELECTRICAL PHENOMENA."

Ma. EDITOR: — I notice that W. D. H. has been made the subject of pranks from the "electrical fluid." If he touches a young lady by any accident, "an unpleasant sensation" is the result, accompanied by "snapping." So when he puts his knuckle to his wife's nose, a "spark" passes — probably meaning that she "sees stars." If Mrs. H. was like some ladies, when treated with an application of her husband's knuckles, she would create "quite a disturbance in the electrical fluid," and perhaps "sparks"

would pass in more ways than one. At any rate, I would counsel the excellent professor to be very discreet in his methods of experimenting, and particularly not to wear gun-cotton clothing, or allow gunpowder to be placed incontinently in his boots. I apprehend that he is in some danger from explosions. At any rate, he should be careful about the tongs.

I have, however, myself at times noticed phenomena of a similar character. My hair will "snap" and crackle as though it was undergoing a "combing-down operation." Cats, neat cattle, and other animals, will often exhibit similar appearances. I have seen people light gas by a touch of their fingers. But I never tested my knuckles on a lady's face.

Some theorists hold that men and women are *positive* and *negative* in their relations to each other, and so would probably account for such occurrences as Prof. Henkle relates. This hypothesis would certainly afford a solution for various other phenomena. Perhaps it will also account for the "making of mediums."

It is true that there have been during the recent winter a good many instances of a character not unlike those described by the Professor. We have had several thunder storms. The lightning was very brilliant. The season has been unlike its predecessors. Perhaps by the time of the next meeting of the American Association for the Advancement of Science, at Montreal, some paper may be read giving a sketch of these matters and a hypothesis to account for them. Perhaps Prof. Henkle will do it himself. It would be a valuable contribution to science.

Will Prof. Henkle, or some other *savant* of equal merit, instruct us as to what "the electrical fluid" is? We do not want a personal application of lightning, for the purpose, but would like seriously to be informed. If I place a slip of copper in a tumbler of water acidulated by SO^3 , and a slip of zinc in another tumbler filled with a similar fluid, and then join the ends of the slips together as they stand out in the air, the zinc begins to corrode away, and bubbles of gas come off at the immersed end of the copper slip. This gas is hydrogen.

Now, if I extend a wire from a battery made of such slips, etc., carrying it, if I please, several miles, and immerse the end of it in a vessel of water, I suppose that the same hydrogen gas will come off. Attending this operation are those peculiar phenomena, which learned men term "electrical," as every body familiar with

telegraphing well knows. Let me now present a hypothesis. The sulphur and oxygen of the sulphuric acid combine with the zinc, leaving the hydrogen of the acid free, in the nascent state. Propelled by caloric, it rushes forward on the conducting metal whithersoever it will carry it, eager as a bridegroom, to see whether it can not find oxygen somewhere, to combine with it to form a watery vapor. In the nascent state, hydrogen would display that peculiar affinity; and so that peculiar propulsion, and the attendant phenomena, have received the name of *electricity*, a name being wanted for the thing, though caloric is in fact the actual substance.

I do not wish to draw Prof. Henkle into any experimenting of a character to endanger his peace of mind, but would be pleased if he, or one "greater than Solomon," would shed light, not phosphorescence, on this subject.

NEW YORK CITY, March, 1857.

A. W.

EDUCATION OF AMERICAN SCHOOL-GIRLS.

We have been suspicious for a long while that we had failed to discover the great cause of the miserable bodily condition of so many young women, in what is called fashionable society. We had observed that a very large proportion of them, notwithstanding their wretchedly-chosen diet, and other draw-backs, retained a very comely appearance of health and rotundity when at school, which they lost as soon as they were allowed to commence the midnight dissipations of the ball-room. This, with our knowledge of its legitimate result, was sufficient, and we considered the matter settled.

Lately, however, we have had the opportunity of conversing with an intelligent young lady who has had the usual opportunities of a fashionable education, and she assures us there is an almost universal horror of being fat, that causes great numbers of them to drink vinegar and eat chalk and slate-pencil dust, to avoid gaining flesh! She tells us that nearly all who desire to be "elegant" in their figure adopt these horrid practices as the readiest means of averting the consequences they dread! This we call a horrible discovery indeed: that it was practiced, we were aware, amongst many unfortunate young people who had

not the advantages of careful domestic instruction; but when informed of its general prevalence, it strikes us with peculiar horror. That in the very bloom and outburst of her womanhood, at that period when the Creator designed to impress her with the crowning glory of her true nature and His powers, when He has made the countenance speak love and maternity, she should defy Him, and cut off the life-current—this is horrible indeed; and the consciousness that the frightful practice obtains general currency, is a sad thought for the parent and the life-teacher.

Very few persons imagine the extent to which this suicidal perversion of the natural instincts will go, in young women who are under the influence of their imaginary superiors in what they consider graceful thinness. Much has been said about tight-lacing, and because the corset has partially gone into disuse, people imagine that compression of the lungs has ceased; it is far otherwise; hooks and eyes and whalebone have taken their place, and the insane devotee willingly starves herself by the year! One designing woman, envious of the beauty of an associate to whom nature has given a figure of beautiful rotundity and health, will set two-thirds of her acquaintances half crazy to emulate her bony proportions. A heartless and vicious school-girl has only to blow up her cheeks and say "fatty," to the weak-minded girl to whom nature and a happy home have given perhaps great personal beauty, and who enjoys the degree of vegetative life which can alone give her a constitution that will fit her for the duties of a wife and mother—and she has been stung by a viper that renders her miserable for life. Soon the roses fade from her cheeks, the beautiful rotundity of her person decreases and fades; the parent's heart bleeds, and he consults his physician. He, either ignorant, indifferent, or selfish, gives some absurd prescription, and leaves her to her fate. Chlorosis [the result of imperfect nutrition] seizes her; she loses her spirits and refuses to mingle in society, which, bad and enervating as it is, is now her only hope, and her only chance for life is marriage and maternity—about an even one between life and death.

Compare all this, which is so common in America, with the results of the discipline and education of young girls in England. There, we find the daughters of their aristocracy often leading natural and healthful lives, wearing suitable clothing, and shoes with soles thick enough to keep the electric force of youth in the body, taking free exercise on foot, in all weather, miles and miles

every day, blooming with health and happiness, and laughing and playing at blind man's buff, with their fathers and mothers.

Here, conceited, ignorant of all useful knowledge, cold, calculating, and impudent, the young girl is taught to look out for a rich husband, from the moment she enters "society" — a horde of over-dressed and ignorant people who eschew all intellectual pursuits, and live in vulgar emulation of their superiors in extravagant expenditure and ridiculous pretension.

Such is the result of our American system of education; such will be the mothers of the next generation.—*The Scalpel.*

EXTRACT FROM A TEACHER'S APPEAL TO PARENTS.

1. *If children are allowed to be absent, for no good reason, they are, virtually, taught to look upon their school and its duties as of quite secondary importance.* If the doing of some trifling errand, the making or receiving visits, or the participating in some pleasure excursion, is allowed to interfere with school obligations, your children will, most assuredly, consider the engrossing object, or objects, as of paramount value. Of course their interest will be diminished, and their progress retarded, in a degree proportionate to the extent and frequency of the infringement upon the claims of the school. If you wished for a lad to assist you on your farm, in your shop or counting-room, you would insist upon having his undivided time and attention. This would be requisite for *his* good as well as for *yours*. If you should have, in your employ, an apprentice who should frequently absent himself, and allow unimportant engagements or amusements to absorb time and attention which should be devoted to gaining a knowledge of his trade, you would at once conclude that he would never become a proficient in it. And will it not be the same in school affairs? Are not your children apprentices in the school of knowledge, which is designed to prepare them for the school of life? And have you ever considered that only the prompt and faithful discharge of the duties of apprenticeship can qualify them for workmen "that need not be ashamed of their work," when they shall have served out their time and taken their stand with the free actors on the stage of life? If you have not, let me beseech you,

as you prize the good of your children, and wish their greatest advancement, to pause and reflect.

2. *If children are often absent they will fall behind their classmates in their studies, and, consequently, lose much of their interest in them, and perhaps acquire an actual dislike for school and all its exercises.* Of necessity most of the instruction in large schools must be given to whole classes and not to individual scholars. Your children receive their school knowledge in this way. It is very essential for the progress of a class, and its individual members, that no scholar be absent from a single recitation—for, frequently, the loss of a single lesson may impair a scholar's interest and advancement for a whole term. Let me take an instance to illustrate this: I have a class in Arithmetic, and it is often necessary for me to explain some principles, the clear understanding of which, by the pupil, will serve as a key to subsequent lessons. To-day I occupy some time in explaining some principles to a class of twenty, of which your child is a member, but, unfortunately, an absent one. To-morrow he comes to school, but is unable to comprehend and perform the exercises of the day, on account of his absence the previous day. What therefore must be done? Certainly one of two things. I must either devote time and strength which belong to the whole school (and which the school needs), and repeat the explanations given in his absence; or I must leave him to grope along in the dark, as best he can, and, probably, to become disgusted with his school and its studies. He will not only droop himself, but will exert a withering and disheartening influence upon the whole school. And is it not true that a teacher's ability and devotion are often called in question on account of a want of interest and progress in scholars, when the true and sole cause for such indifference and languishing, is to be traced to their frequent absence? Is it not also true, that truancy, that most pernicious and destructive habit, sometimes has its origin in the trivial importance which is attached to constancy of attendance, as manifested in the slight causes which occasion absence, and by which children are induced to believe that the loss of a school day is of no consequence? If this is ever the case, let the dangers which cluster around the truant's path—dangers neither few nor small—urge you seriously to reflect, and wisely and seasonably to act. But I must leave this head for your more extended consideration, and proceed to

notice one or two prominent objections to *unseasonable attendance*: this I will do with much brevity.

1. *If children are allowed to be tardy in their attendance at school, they will be prone to undervalue punctuality in other affairs.* Children should be taught to look upon their school as of paramount importance, and regard the school-room as their workshop—the place of *business* for them, and no concern of a secondary nature should be allowed to interfere in the least degree. It is extremely desirable that you impress strongly upon the minds of your children the fact, that whatever is worth doing at all, should be done well, and at the proper time. Teach them that *punctuality* in the discharge of every duty is of the highest importance; and if you train them to observe it punctiliously in relation to their school, they will be likely to do the same in every duty of subsequent life. In this way they will form a habit of inestimable value.

But I have considered the evils of unseasonable attendance only in relation to its effect upon him who trespasses. I will briefly allude to another objection to that habit, which is,

2. *That children who enter the school-room at a late hour, interrupt the order of the school, and interfere with some passing exercises, in which, perhaps, they should have a part.* Thus a whole school is often made to suffer from the deviation of a few. In some schools much time is actually lost on each half of the day by the dilatoriness of individual members. You have, doubtless, noticed the effect upon a congregation at church, caused by the late entrance of persons, and I will leave this point by merely suggesting the analogy between the two to your own mind—being convinced that due reflection will induce you to regard the whole matter in its true light, and to act accordingly.

THIS TEACHER'S LETTER (from which the above extract is made) is intended for general circulation, and should be read by every parent in the land. Price, \$2.00 per hundred. If fifty or more are ordered, they will be sent free of postage, by addressing either,
F. C. BROWNELL, Hartford, Conn.
TALCOTT & SHERWOOD, Chicago, Ill.

NEW YORK CITY.—The special committee of the board of education, on the non-attendance of children at public schools, estimated that there are between 30,000 and 40,000 children in that city, between the ages of 5 and 16, who are not partaking of the benefits of public education.

INFLUENCE OF TEACHING, UPON THE TEACHER.

Not the warrior, nor the statesman, leads the vanguard of humanity, but the Teacher. Though his victories are bloodless, his triumphs tearless, yet they are not inglorious. Flowers strew his pathway, and a halo of brightness marks his course.

We would by no means claim, that "*Ichabod Cranes*" are the *ne plus ultra* of modern development, but we do assert, with grateful pride, that many of the best cultivated intellects in the world, have been devoted to the instruction of the young. Noble talents, deathless energies, have been laid upon the shrine of learning. Aye, many of nature's truest noblemen have devoted all their exhaustless wealth of mind, and even life itself, to the advancement of science; and though no marble monuments may mark the resting place of their mortality, proud columns of intellectual grandeur, reared and polished by their skillful hands, stand out in bold relief, living memorials, which shall perpetuate their names, not only to the end of time, but onward, even through the long annals of eternity.

Happy they, whose names are written thus on the immortal tablets of the soul — tablets more enduring than even those on which the finger of Divinity once deigned to write.

But, *imperfection* is stamped on all things earthly, and the *Teacher*, like men in other vocations, is "subject to infirmities," and the downward tendency of some phases of his life can but be obvious.

Sole monarch of a petty realm, he learns to *lord it well*. He "magnifies his office;" his soul shrinks to a mere speck, and in its narrowness, he forgets the godlike glory of benevolence, wondering why all men are not as *he* is; why *his* plans are not adopted by every teacher; in short, why the whole *corpus doctorum* do not make him their model. He listens for the echoes of his fame; and wonders that the "*vox populi*" withholds his rightful due.

Furnished with a little hoard of maxims, he tells them o'er "from morn till dewy eve," nor ever dreams of greater intellectual stores than his; nor does he see that the little stock of thought with which he commenced his pedagogical career, is daily "growing small, and beautifully less."

Fortified in his own opinions, by profound conceit, he feels himself an *oracle*, and wonders that there are so few to do him reverence. Complacently, he recounts his many excellencies, and

congratulates the world in its possession of such a treasure as himself.

The picture I have rudely sketched, though true to nature, is not, of course, of *universal application*; for there are noble spirits, which shed continually a strong and steady light, and still grow brighter for their shining. Such a teacher is "A thing of beauty — a joy forever."

But, that many natural tendencies of the teacher's life are belittling, who will deny? In daily contact with those of mental power inferior to his own, imparting continually of his own intellectual substance, adapting himself to the narrow capacities of his pupils, his mind unconsciously assimilates itself to theirs, and unless his mental treasure-house be frequently replenished, by accessions from "the mind," the product of his brain will be more and more diluted, till it shall become insipid, even to childhood. Thus the intellectual giant of to-day, fancying, perhaps, that 'tis himself who holds the shears of destiny (for a large part of the world), is shorn of his strength, becomes, indeed, a pigmy in science, a miserable relic of his former self, cherished, it may be, but only cherished as an interesting fossil.

I knew a teacher once (for such he called himself), who conscientiously refrained from reading, dispensing with it almost entirely, "for fear of injuring his eyes, *and his originality!*" Heaven preserve us from such originality. Such ignoble life may do well enough for toads and serpents, but man's, methinks, should be a higher, nobler destiny.

These specimens of conceited humanity, always remind me of that quaint couplet of Cowper's:

"To follow foolish precedents, and wink
With both our eyes, is easier than to think."

But who of living men should be a thinker, if not the teacher? His very life should be instinct and glittering with the fires of thought; for what but the vital stirring of his own intellect, can warm and quicken into life the dormant energies of his pupil's mind? What but the living magnetism of his sympathy can cause the life-chords of his pupil's spirit to vibrate harmony?

And yet, how many teachers of the young seldom or never think; how many are but half awake, who, if they think at all, only think to note the passing days, and count the dollars and cents which shall be paid to them at the "end of the quarter." How many rest satisfied with present attainments, content to

repose on the few laurels which they fancy they have already won, imagining that a "Certificate from the Board of Examiners" and *one Term's experience*, is a warrant for success in all coming time.

Intent upon the great work of teaching, they forget that their own minds can be kept from barrenness, only by constant cultivation; they neglect study, neglect reading, and often, too, withdraw themselves from society, thus sundering the links in that golden "chain of obligations" which binds man to his brother man. By such a mode of life, what wonder that they learn to indulge in moods "grand, gloomy, and peculiar."

Pondering continually over the petty cares and trials of the day, magnifying all the little mole-hills into mountains, they naturally enough pronounce teaching a "slavish life," an "up-hill business," &c. And what wonder that such teachers become "the terror of childhood." They imagine their patrons to be a horde of tyrants, whose pleasure it is to keep the "poor teacher" bound relentlessly to the ever-moving wheel of the tread-mill, and such iniquities of the fathers are of course visited upon the children.

Thank Heaven, the duties of our high vocation *need* not work such ruin. Rightly followed, rightly understood, it abounds in richest blessings. Happy they whom noble aims and holy purposes inspire. True to themselves, true to others, true to Him who has appointed them to labor in his vineyard, they enjoy continually the smiles of God, and travel onward through a constant shower of Heaven's good gifts, and write their names among "the few immortal names that are not born to die."

Happy they, who, by the soft bonds of holy sympathy, can link to themselves the trusting heart of childhood. Truly he is blessed, who has learned to play skillfully this harp of a thousand strings. 'Tis said that —

"White winged angels meet the child
Upon the vestibule of life."

If seraph-spirits from their starry throne keep watch o'er childhood, shall not the wrongs they suffer be placed on record, by these viewless messengers of Heaven?

Oh, then, let us touch gently the quivering harp-strings of the deathless spirit, for notes, which, at our bidding, come forth from out young hearts, are destined to sound on, ages after we have passed away, "blending their discord, or their melody, with the solemn music of eternity."

MATHEMATICAL DEPARTMENT.

W. D. HENKLE, Editor.

SOLUTION OF No. 18.—By JACOB STAFF.

If 12 men mow $3\frac{1}{2}$ acres of grass in 4 hours, and 21 men mow 10 acres in 9 hours, how many men will it require to mow 24 acres in 18 hours, each man mowing the same quantity or weight of grass, and the grass growing uniformly?

Let x = the acres at any time,

y = the growth at any time,

q = the quantity cut at any time,

n = the growth in one hour,

p = the proportion of the quantity cut to the growth in an instant by one man or $\frac{dq}{dy}$

l = the height of grass at the beginning,

z = the number of men required.

Then $\frac{dq}{1+y} = dx = \frac{pdy}{1+y}$ Integral is $x = p \cdot h \cdot l \cdot (1+y) + C$

when $x=0, y=0$ and $C=0$, therefore $x = p \times h \cdot l \cdot (1+y)$. Substitute in this formula the given numbers in each condition and we have

$$3\frac{1}{2} = 12p \times h \cdot l \cdot (1+4n) \quad (1)$$

$$10 = 21p \times h \cdot l \cdot (1+9n) \quad (2)$$

$$24 = zp \times h \cdot l \cdot (1+18n) \quad (3)$$

From (1) and (2) we have $49l(1+9n) = 80l(1+4n)$; from a table of logarithms we get by inspection $n = .33875+$; p is then found $= \frac{10}{21} \cdot \frac{m}{.6073}$. Substitute in (3) and we have

$$z = (24 \times 21 \times \frac{.6073}{m}) \div (10 \times \frac{.851106}{m}) = 35.96 + \text{men.} \text{—Ans.}$$

$h \cdot l$. Hyperbolic logarithm, m the modulus.

[*Samuel Alsop*, author of *Alsop's Algebra*, by a different process arrives at the equation $\frac{z}{8} = \frac{\log.(1+4r)}{\log.(1+9r)}$ "which," he says, "solved, will give r the rate of growth." "The whole difficulty, then, consists in solving this equation. This, I believe, can not be done except by approximation. I will think further of it,

however." Mr. Alsop also says, "Robinson is certainly *wrong* in saying that the men mow half the growth. This would require that they should pass over the field at a uniform rate, which by the question they do not."

Mr. Staff writes: "If Mr. R.'s philosophy is right, his figures are wrong; and if his figures are right, his philosophy is wrong. I think the latter is the true case. He rather gives the solution of the "ox question" of yore. He has not apprehended the difficulty in this problem—no curve—all arithmetical progression. He measures the amount of growth by the last stalk of grass cut in each case. I think we can get a plain view of his error when we consider that only the last stalks would bear his proportions; but the stalks that had been cut, the one 4 days previous to the last, in the first case; and the stalks cut 9 days previous to the last, in the second; could not have the same proportion of 4 : 9, for we know that the first stalks were equal, or 1 : 1. I have not gone into an examination of his figures. I presume they are right, and, if I do not misunderstand his principle, there need not be any surprise at obtaining the same results from different figures. I view it thus, $a : b :: c : d$ and $\frac{a}{2} : \frac{b}{2} :: c : d$."

Mr. Stribbling writes: "Robinson is wrong in supposing that $\frac{1}{2}$ the growth of grass is mown. I was under that impression for a while myself, until I drew a diagram like the following." Here he gives his diagram, which represents "a longitudinal section of the growth that *would be mown*" and "a section of growth in the stubble." He thus concludes that the growth on the stubble is the most, and that Mr. R.'s result "is therefore evidently too much."

Mr. Staff is of the opinion that harmonic progression is the only algebraic method—involving infinitesimals. He illustrates thus: "A man swings his scythe say once in a second, and cuts the small quantity p ; the grass at the start is (a) or 1 in height; the first second he goes over the space $\frac{p}{1}$. Let the growth of the grass in one second be i , then the second swing, or second, he goes over $\frac{p}{1+i}$, the third second $\frac{p}{1+2i}$, &c. We will then get for the

1st condition $p(\frac{1}{1} + \frac{1}{1+i} + \frac{1}{1+2i} + \frac{1}{1+3i} \dots \frac{1}{1+ni}) = \frac{3\frac{1}{2}}{12}$. For the

2d condition $p(\frac{1}{1} + \frac{1}{1+i} + \frac{1}{1+2i} + \frac{1}{1+3i} \dots \frac{1}{1+mi}) = \frac{10}{21}$. For the

$$\text{3d condition } p\left(\frac{1}{1} + \frac{1}{1+i} + \frac{1}{1+2i} + \frac{1}{1+3i} + \dots + \frac{1}{1+si}\right) = \frac{24}{2}.$$

The n , m , and s stand for the number of seconds in the respective times, 4, 9, and 18 hours. From the first we get p in terms of i , and from the second i , and by substitution in the 3rd z is had.

Perhaps $\frac{1}{1+(n-1)i}$, $\frac{1}{1+(m-1)i}$ and $\frac{1}{1+(s-1)i}$ would more properly be the last terms, and n , m , and s the number of terms respectively, and 1 the first term in each. Because the terms in the series are the reciprocals of an arithmetical series, it is an harmonic series, and the difficulty of solving the problem in this way would consist in obtaining a convenient expression for the sum of this series. I have never pursued the investigation, and do not know whether it is practicable. It would offer a good exercise, whether successful or not, to try it. The first term, the last term, and the number of terms in an harmonic series to determine the sum, would be the problem to which this reduces. It would, if practicable, be a grand method of proving our solution, which, I think, is beyond the reach of danger from sound argument."

Mr. Stribbling in his investigation, with his final correct view of the problem, brought it to a series which was harmonic, although he did not perceive it, nor did he dispose of it further.

We have been minute in giving the views of our correspondents on this problem, because it is one of considerable interest. We have no doubt that Prof. Robinson will, after seeing the above, be willing to yield to the decision of the many. It should also be stated that Mr. Staff says that he can not conceive how the withering of the grass can be consistent with the problem.

NOTE.—After the above was set up, we received from Mr. Alsop a complete solution of the equation referred to, namely, $\frac{\log.(1+4r)}{\log.(1+9r)} = \frac{48}{88} = .6125$. He obtains the value of r by first assuming different values, and making the necessary corrections by interpolation. The operation was laborious, but it ended in a satisfactory result, for when $r = .338704$ he obtained, by using logarithms to 7 places, .6125 exactly for the value of the fraction. This value it will be seen differs from Mr. Staff's in the fifth decimal place. Mr. Alsop's final result is 35.963+, which shows Mr. Staff's to be correct so far as it goes.

NOTE.—We propose to publish, for the benefit of quite a number of our correspondents, a series of interesting problems, the solutions of which we shall not pledge ourself to publish. We may, however, at times, give the solutions of some of the most important. To distinguish these problems from others, we shall number them by the letters of the alphabet. We shall always acknowledge the solutions which may be sent to any of these problems.

PROBLEM A.—By J. G.

It is required to draw, geometrically, the line of quickest descent between the circumferences of two given circles.

PROBLEM B.—By J. G.

To find the position of the line of quickest descent from the circumference of one circle to that of another, the former lying wholly within the latter.

PROBLEM C.—By J. G.

To determine the line of quickest descent from one circle to another, the latter lying wholly within the former.

PROBLEM D.—By J. G.

To determine the line of longest descent from a given point to a given circle.

PROBLEM E.—By J. G.

To determine the line of longest descent between the circumferences of two given circles.

EDITORIAL MISCELLANY.

DEAR JOURNAL:—I separated from your readers at Evansville, in Vanderburg county. My next place of visitation was Princeton, in Gibson county. This is a pleasant, quiet place, numbering about one thousand inhabitants; and was one of the earliest settled towns in the State. It is noted for the prevalence of a high religious and moral tone, and consequently affords good social advantages.

There are, at present, two schools in operation, both private enterprises. First, the Princeton Academy, under the charge of Mr. Henry T. Morton, aided by his accomplished lady. The Music Department is conducted by Mrs. Paxton, a superior teacher, and affords excellent advantages. There are likewise other teachers in the various minor departments. Mr. Morton deserves great credit for his exertions to build up a good school in this place; and his success—far beyond his anticipations—shows, upon the part of the citizens, a proper appreciation of his efforts. He has expended several thousand dollars in constructing and furnishing a school-building, surpassed by few similar structures in the State. In regard to furniture, apparatus, and cabinet, he is not equaled by any other.

The other school is under the supervision of Mr. Bird, formerly Prof of Mathematics in Tusculum College, Tennessee.

The citizens of Princeton support these schools liberally; and, in return, are enjoying the fruits of their liberality. There have been several efforts made to have efficient free schools, but with very little success. Many of the wealthy inhabitants are opposed to these institutions; and though they are in the minority, still they succeed, partly by their votes, and partly by overawing the votes of others, in preventing the accomplishment of the enterprise. The people, therefore, despairing, for the present, of obtaining from these *nabobs* the privilege of raising by vote the tax necessary for free schools, are depositing their school funds, and waiting, as patiently as they can, for that "brighter day coming." It is earnestly hoped that it may dawn soon.

I visited Owensville in the same county. It is a small village of some three hundred inhabitants, and is surrounded by a beautiful and well cultivated district. Educational matters are entirely prostrate, here. There is no school-house of any kind, and no immediate prospect of there being one. Indeed, the majority of the people in the township are very hostile to schools, looking upon the whole system as a stupendous fraud, designed to enrich some one, they know not whom. They exceedingly regret that free schools are constitutionally provided for; would rejoice in the privilege of voting them down, and then shout the jubilee of a new creation. They are peculiarly hostile to the township library, consider it a very wicked waste of the "people's money," and during the last two years, but *twenty-five volumes* were read. Here is Egyptian darkness, "so thick that it might be felt." I scarcely need say that I did but little for the *Journal*, here.

In Columbia, in the same county, things are in a much better condition; they sustain their schools well, and pretty liberally patronize the *Journal*.

The statistics of Gibson county, for the year 1857, are the following:

General School-Tax levied, - - - - -	\$4,150
Tax for building School-Houses, - - - - -	none
Cost of Criminal Jurisprudence, - - - - -	\$1,500

Population, Census of 1850, - - - - - 10,771.
 Number over 20 who can neither read nor write, - - - 1,128.

Knox county came next in course. Vincennes, its county seat, is the oldest town in the West, having been settled the next year after Philadelphia. It numbers some two thousand inhabitants, and is a pleasant, though not a stirring place. In educational matters there has generally been a great delinquency. Public schools are mostly kept open three or four months, until the school funds are exhausted, when numerous private enterprises spring up during the summer, to give way again for the annual dispensation of a few dollars from the general school fund.

Some three years since, the Trustees of the Vincennes University, in a suit with our State University, received some sixty thousand dollars. With a part of this they have established a school under the supervision of the Rev. R. M. Chapman, assisted by Mr. S. B. Allen. I visited the school, and was much pleased. The Trustees have been quite fortunate in the selection of their teachers. A small but neat building has been erected for a female department. Under the present management, I fear Vincennes will not be benefited by her \$60,000. It will have a tendency to put off, indefinitely, the organization of an efficient system of free schools. This University, as it is termed, will be supported by the rich, and defended from the *very poor* by high tuition fees. And of the class just named, Vincennes has, probably, a greater number than any other town of the same size in the State. Were the arrangement made by which the University should serve as a high school, free to all classes of the place, and then the subordinate schools supported by a tax, an amount of good would be realized by all the citizens, which will not be likely to be felt under the present management.

There is an excellent parochial academy in the vicinity of Vincennes, under the care of Mr. Alexander.

Knox county exhibits the following statistics for the last year:

General School-Tax levied, - - - - - \$4,071.
 Tax for building School-Houses, - - - - - \$880.
 Cost of Criminal Jurisprudence, - - - - - \$1,200.
 Population, Census of 1850, - - - - - 11,084.
 Number over 20 who can neither read nor write, - - - 670.

I next visited Sullivan county. Sullivan, the county seat, is a small, but pleasant village, and is slowly increasing in population. There is but a small amount of educational spirit, here, which is manifested by the condition of the schools and the school-building. Of the latter there is nothing deserving the name. The schools are kept in a miserable, dilapidated, old building — once the county seminary. It is illy suited to the purposes of teaching, and is uncomfortable in the last degree. It is really a disgrace to the place; and, most fortunately for its reputation, stands in the rear of the town, so that it is not likely to be seen, unless especially inquired for. Mr. G. Anderson was the teacher in charge; and seemed disposed to do his duty, if the house and its furniture would

only let him. Notwithstanding all this, Sullivan has several citizens who feel an interest in schools. They are good, but there are two few of them. I obtained, here, several subscribers for the *Journal*.

Carlisle, in the same county, is smaller than her sister Sullivan, but far ahead of her in educational enterprise. She has made arrangements for putting up, during the present year, a good school-building, well supplied with all needful appliances; and intends to introduce the graded system, during the coming fall. This enterprise speaks well for the citizens of this place; and it is earnestly hoped that they may realize all their anticipations.

There are two other schools of the higher order, in this county—one at New Lebanon, under the care of Mr. Allen; the other at Merom, superintended by Mr. Humphrey. I had not an opportunity to visit them, but heard that they were good schools, and well sustained.

Sullivan county is far in the rear in educational matters. There is but little interest manifested in schools, generally; and in many parts of the county there is decided opposition to a free school system. Several of her public men and politicians are hostile to the measure, and publicly and privately throw the weight of their influence in the opposing scale.

Sullivan, or at least a portion of her citizens, petitioned the last Legislature for the repeal of the School System, and when it was found that the Constitution made it obligatory upon the Legislature to provide such a system, it was sought to accomplish the same end by moving an indefinite suspension of the system. It is scarcely necessary to add, that even this last attempt signally failed. It is by no means pleasant to record such facts; they are both discreditable and discouraging. It is hoped, however, that Sullivan will awake, ere long, to her true interests. Her agricultural resources are excellent, and rapidly developing; and in most other things her citizens are enterprising.

Truly yours,

E. P. C.

NOTES BY THE WAY.—In accordance with previous arrangement, I met a company of Teachers at Newcastle, Henry county, on the afternoon of the 23d. The County Association of Teachers had been formed about three months. Among the moving spirits, are Kinley, Pearson, Macy, Spencer, Fawcette, and others. During the day-time, instructions were given on the branches usually taught in Public Schools, and on Didactics. Each evening, lectures were delivered on the subject of School Reform, to citizens and teachers.

Newcastle has a fine school-building, but at present vacant for want of a teacher. Schools have never been graded, nor free except while the public money lasts. The prospect for improvement in the schools of this county is fair. A fine Association of determined, working teachers, will make an influence that will bring about the desired result.

By the courtesy of J. S. Ferris, Esq., the gentlemanly Auditor, I present the following statistics:

Amount of Public Funds received for Schools, - - - \$8,626.78.
Amount raised during past year for building School-Houses, \$13,076.33.
Number of Scholars numbered in the county, - - - 7,413.

Henry county appreciates the labor and talent of her teachers. Mr. Kinley, a prominent teacher, is her Senator. Mr. J. S. Ferris, a noted teacher for 17 years, is Auditor. Several others, once leading teachers, now hold her most responsible offices.

Friday 27th, found us at Carthage, Rush county. Citizens and teachers convened to listen to what might be said. This is a settlement of Friends, who have for years supported good private schools. Nearly every family has teachers in it, and the whole community is noted for intelligence and interest in education. Of course a Teachers' Association was formed. Daniel Clark was elected President, and Miss E. W. Thornburgh Secretary. It will meet once each month.

No difficulty in getting intelligent teachers to work, forming Associations, and holding Institutes.

Mr. Samuel Crowe, a gentleman of fine attainments, and the right spirit, has taught the classical schools for the Friends, during the past winter, and will continue here.

J. H.

[From the New York Teacher.]

THE INDIANA STATE TEACHERS' ASSOCIATION held its annual meeting at Indianapolis, Dec. 29, 30, and 31. About two hundred teachers were in attendance—the brawn for an educational interest yet destined to become potential. The order of talent was higher than I have witnessed in Illinois or New York; still the business tact was not ahead. Indiana is a state of colleges, and these were largely represented in the association. The addresses delivered were generally interesting, but too long. I liked better the Illinois custom of cutting them down to twenty minutes each.

The Indiana and Illinois associations both employ state agents, a fact to which they owe much of their prosperity. I think that if this policy had been well tried in our own State, it would have done more than any other agency yet employed to enhance the importance of the teacher, and elevate the calling into a profession. E. P. Cole, of Evansville, is the agent now employed in Indiana.

The School Journal has just completed the first year of its existence, some hundreds of dollars in hand. The economy has been too rigid, it must be confessed, but then freedom from debt is an acme to which many of our journals do not attain. As a rule, up here, those which receive assistance from the legislatures fare the hardest—none of them meeting expenses, while the others are all clear and in full sail.

Most, I think all the state associations west, hold two meetings each year. There is little partisan spirit in the matter of electing officers—a

few minutes being sufficient to do the whole business. There is, however, the usual vanity of debating; many offer resolutions, and oppose motions, apparently for the sole purpose of making a speech, getting their names into print and themselves advertised.

The zeal for educational improvement, *subjectively*, is very high among the teachers of Indiana. Although only a third as many were in attendance as at the Illinois association, they surpassed them in subscribing for educational papers. Twenty-five subscriptions were received for the American Journal of Education, and about eight hundred for the Indiana School Journal. Educational works of all kinds seem to be liberally patronized.

The school legislation is defective. Only a moderate fund exists to support schools, and the governor recommended in his message that it should be expended to pay the State debt, leaving taxation to pay for teachers.

Some of the educational men favor the establishment of a normal school, but it is not feasible. Mr. Mills, late superintendent, advocates the creation of several such institutions, to hold winter and summer sessions, and employ the spring and autumnal vacations in conducting teachers' institutes in the several counties. It is a magnificent plan, only it would soon work the normal school professors to death.

There is a great deal of zeal for teachers' institutes, but it is not according to knowledge. The sessions are too short, not exceeding a week; and the conductors are generally expected to pay their own expenses and work for nothing. Railroad fare is higher, and other expenses are as high, as in New York.

The Illinois legislature seems determined to try the back track in educational matters. The educational committees are made up, however, of the best men in each house; but party spirit was high. One party stole from the other the organization of the house of representatives, which complicates matters. A bill has already been introduced to repeal the act creating a superintendent of public instruction, also the free school law. But I do not think it will be reported, or acted on by the legislature.

The county school commissioners take charge of the school moneys, license teachers, visit schools, etc., for \$2 a day. It is proposed to abolish this office and create nine state commissioners, at a more liberal salary. But if this should be done, the state superintendent would be again united with the department of state.

Both the retiring governor and Gov. Bissell are warm friends of schools. It has, however, been too much the rage to amend the school laws, now almost incapable of intelligent construction. There can not be steady prosperity in educational matters till a permanent policy is adopted and persisted in till it approximates the character of an institution. I verily believe that if Sup't Rice was in office at Springfield or Indianapolis, with his usual power to operate, school matters would amount to more than they are likely to do, for some time to come.

But in the West, education advances. The schools are in advance of Eastern New York. The teachers are alive; the standard of qualifications is higher than in New York; and I rather think employment is more permanent and compensation more liberal. A. W.

MR. E. P. COLE, Agent of the State Teachers' Association since October 1st, 1856, is about retiring from this position. The Association is much indebted to Mr. Cole for his faithful labors in behalf of the interests of the *School Journal*, and of Education. He has visited and canvassed many of the most unpromising parts of the State, generally with good success. He has visited not merely the larger places in the different counties, but he has gone into the small villages and the country districts. In this work he has been often obliged to resort to the method of locomotion which Bayard Taylor used in his first tour through Europe. But this, although somewhat tedious and uncomfortable to him, has enabled him, through the pages of the *Journal*, to give us a more accurate idea of Educational matters, in a large part of our State, than could have been obtained in any other way.

The pictures which he has drawn are dark ones indeed, but it is best to know the truth. If the citizens of any State have a greater work to do than we have, we pity them. In view of the facts which Mr. Cole's letters have revealed, we must not expect too much, or look too soon for the result of our labors. Let us remember that the harvest comes not in the spring-time, and let us be willing, with earnest hearts and patient hope, to work and wait "for the good time coming."

Now what are the facts in regard to our schools? They are briefly these. We have a State tax which will only supply our schools with teachers, at moderate salaries, for two or three months in the year. As a necessary consequence we have a large majority of teachers in the State who are entirely unfitted for their work. Large portions of our State, whole counties almost, have no free schools, or had none last year. In many counties free schools are almost disreputable. The wealthy educate their children at private institutions. The poor are not educated at all. The educated, through self-interest, are opposed to the school law, and the ignorant because they know no better. In many of our large cities even, either no free schools exist, or they are cramped by such a narrow policy that they are little better than none.

This is the real state of the case here in Indiana. It is much worse than we had supposed. We do not say these things because we wish to discourage, or because we feel discouraged, but we like to know the truth, and we are willing that others should know it. We are sorry to see some of our best teachers wearying of the work and entering private schools. However valuable these may be, they are not what we need. Indiana must have an efficient free school system. Have we not sufficient moral courage to devote ourselves to the accomplishment of this work, with all the discouragements which are before us?

STATE AGENT.—The Executive Committee of the State Teachers' Association, desirous of carrying out the views of the Association, as expressed at its last meeting, and of promoting the cause of Education permanently in our State, have engaged Mr. J. HURTY to enter the field as State Agent, to commence the twenty-third of March.

The Agent will devote as much time as practicable to holding Teachers' Meetings, forming Teachers' Associations, and holding Institutes, lecturing to citizens on the subject of Public School Education, and obtaining subscriptions for the *Indiana School Journal*.

In order that he may reach as many counties as possible during the spring and summer, it is thought desirable to have his labors as brief as may be consistent with the interest of the cause, in the several counties where he may visit.

It is earnestly hoped that he will meet with a prompt and efficient co-operation from teachers and friends of Education, in every section of the State. The Agent will be ready to visit those portions of the State where teachers and educational men may desire his labors.

Mr. Hurty's experience in holding Institutes, his position as Superintendent of Union Schools for the last nine years, eminently fit him for the work which the Association has undertaken.

It is hoped that by the combined labors of Agent, Teachers, and friends of Education in all parts of the State, the way will be prepared for holding a large number of Institutes during the next fall and winter. The work is one in which every teacher should take special interest, and all citizens aid in carrying forward.

J. HURTY, Agent of the State Teachers' Association, will visit Marion county about the middle of this month. He proposes then to visit Hancock, Boone, Hendricks, Hamilton, Putnam, Parke, Montgomery, Tippecanoe, Carroll, and Cass, in order. Any communications relative to his official duties, can be directed to the resident Editor of the *School Journal*, at Indianapolis. As far as can be, his plan of operations will be published, from time to time, in the *Journal*, and we earnestly invite the active co-operation of the teachers in the work in which he is engaged. With it he can do much in every county: without it, the means of the Association will be expended to little purpose.

OUR EXCHANGES.

In the March number of the *Journal* we noticed some of our exchanges. We briefly continue this in the present number, so that Teachers who wish to become acquainted with the Educational literature and school statistics of other States, may know the address of the various Journals of Education, which within a few years have sprung up in most of the Northern States.

Our own *Journal*, though now entering its sixteenth month, finds itself already the elder brother of several of the family, and we are expecting to see soon on our exchange list, "The Minnesota Teacher," and even the "Kansas School Journal," that is, provided Border Ruffianism does not succeed in expelling Freedom and Education both, from the latter territory.

Among the oldest Educational Journals are the "Massachusetts Teacher" and the "New York Teacher." The former we have known from its commencement, but can not say that we prized it highly till last year, when it passed into the editorial care of Prof. Crosby, who made it one of the very best of Journals. This year Prof. Crosby has retired, and the Resident Editor is A. M. Gay, under whose charge it preserves its former excellence. Subscribers should address James Robinson & Co., Boston, Mass. "The New York Teacher" has many admirers. We always read it with interest. Its circulation is large, though from some cause its pecuniary success has not been as satisfactory as that of many inferior Journals; so at least we judge from the fact that the Teachers' Association, at its late meeting, disposed of its interest in it for a term of years, to Mr. James Cruikshank, of Albany, N. Y., who is now both Editor and Publisher, assisted, however, by a corps of Editors appointed by the Association. In size, literary merit, and all that makes a School Journal valuable, in our opinion, there are none published superior to the two above mentioned.

In addition to these, there is the "Rhode Island School master," occupying a somewhat different position from any of our School Journals, always interesting, having fewer professional articles, although the everyday life of the school-room comes in for a proper share of attention. Teachers will find this an eminently practical work. Address Robert Allyn, Providence, R. I.

"The Connecticut Journal," we know but little about. We do not get it once in six months. Either Uncle Sam or the mailing agent is very much in fault. When last we heard of it, some three months or more ago, it was published at New Britain, Ct.

New Hampshire, also, has now a Journal. This is the youngest chick of the family, but it commences its life with a lusty crow, and in the first number informs us that it means to be ahead of us all. Success to it. It aims high, and although it has not hit the sun, it has made a very good beginning. Address Rev. Wm. L. Gage, Manchester, N. H.

Of Western Journals, "The Ohio Journal of Education" is the oldest, being now in its sixth year. "The Michigan Journal of Education" comes next; this is now in its fourth volume. "The Illinois Teacher" is one year younger, while the "Wisconsin Journal of Education" has just completed its first year, being two months our junior. We see by our exchanges that we have still a younger brother, born somewhere in Iowa, whose face we have not yet seen. This babe of the family we shall welcome right heartily. Iowa is the garden of the West, and it will no

be long before schools there will take equal rank with those in any Western State.

Of these Western Journals, all are good. They contain more school statistics and are of more local interest than our Eastern exchanges. They record the Educational growth of States which are developing their resources with a rapidity to which the East is a stranger, and from this circumstance, possess an interest with which Eastern Journals can not be invested, however superior they may be in other respects. The Ohio Journal is published at Columbus, Ohio, J. D. Caldwell, Editor. The Michigan at Ann Arbor, John M. Gregory, Editor. The Illinois at Peoria, C. E. Hovey, Editor. The Wisconsin at Racine, Resident Editor, Jno. G. McMynn.

We have, also, the "Pennsylvania School Journal," which is very much devoted to matters of local interest, such as reports of Associations, &c. It has especial interest for the Teachers of that State. The Editor is Thos. H. Burrowes, of Lancaster, Penn., author of a very valuable work on School Architecture.

Kentucky and North Carolina alone, of the Slave States, have established School Journals. The former, a sixteen page work, is published at Louisville, Ky., at 50 cts. per year. The latter is published quarterly, at 25 cts. per year, at Raleigh.

Of other exchanges, we have only time now to mention one of the most valuable, namely, the "Scalpel," Edited by Edward H. Dixon, and published in New York city. Price, \$1 per year. Among all our exchanges we have none which we like to read better than this. It is always racy and vigorous, and it cuts right and left into the antiquated conservative notions of a profession which is noted for its old fogysms. Teachers, subscribe for the "Scalpel." After having taken it once, you would not willingly be without it.

BOOK NOTICES.

WE call attention to the new and valuable works which are advertised in this number of the *Journal*. Hickling, Swan & Brewer advertise a Series of Readers by Geo. S. Hillard, of Boston, one of the best scholars in the country, and possessed of the finest literary taste. Cowperthwait & Co. have another Geography nearly ready, which they think will contain everything which is valuable in other Geographies, and something more. We will notice this again at some other time. There has been another change in Geographies recommended by the Superintendent of Public Instruction. Prof. Mills recently substituted McNally's and Monteth's for Cornell's. Prof. Larrabee has restored the old order of things. Teachers and Boards of Education will most probably take the liberty to judge for themselves, and not only McNally and Cornell, but also Colton and Mitchell will come in for their share of attention.

We are much indebted to publishers for copies of new publications, but as much matter has been already crowded out of this number, we must delay further notice till next time.

THE
Indiana School Journal.

VOL. II. INDIANAPOLIS, MAY, 1857. NO. 5.

EFFECTS OF EDUCATION ON THE EXTERNAL MAN.*

Living as we do in an age distinguished above every other for its intense devotion to scientific investigation, and for its philanthropic exertions to disseminate knowledge among all classes of society and conditions of men, we may well ask, "what are the effects of education on the external man?" The effects upon the internal man the scholar alone can feel. They, like the odors of flowers, are too subtle for analysis, too ethereal for language. I know not how better to describe them, than to call them a holy fragrance in which the soul lives, grows strong, and becomes like its Creator. Nature is an enchanted garden to the truly educated man. He admires every thing around him, for there is no work of God which is not admirable. Nature wears a constant smile for him, because his heart has been softened and chastened by the love of the harmony in nature.

These internal effects find a faint and imperfect expression in the countenance, and the deportment of life. It is this expression, imperfect as it is, that clothes an educated man with power, and surrounds him with an influence as penetrating as it is ennobling. These external effects or expressions stop not short with the scholar. They are seen by all. Their influence is silent but fearful. They are the external man; that is, the man as he appears to the world in manners and words. Of a few of these effects we shall briefly treat to-day. The subject is too extensive for the fifteen minutes allowed us.

* Read before the Wayne County Teachers' Association, held at Dublin, Feb. 7th, 1857—by A. Hastings Ross. Requested for publication in this Journal.

Before enlarging upon the effects of education upon manners and morals, we beg leave to speak of another subject which falls legitimately under our notice.

The social condition in which men are born is almost an insuperable barrier to their elevation above it. A few may rise above; but the vast majority will tread the beaten track of their fathers. If elevated at all, they are elevated by the scarcely perceptible increment of each generation. In a savage community, all are savages. In a cultivated community, all are more or less cultivated. How does a community pass from a savage to a civilized state? Is it by a simultaneous movement of all the people? Certainly it is not. Foreign influence it is true has elevated a few people quite rapidly; but if left to themselves they would have remained savages or advanced but slowly. At the beginning of their progress a few start forward alone. They make the best weapons, tan the best skins, build the best huts. Others follow them who advance still farther. They too pass away, and others follow; each successive few adding to the knowledge of their generation. After many generations have passed, this savage people emerge from barbarism and are called an enlightened nation. It was by the use of tangible things that they accomplished what has already been done; and it must be by tangible things that we can hope to elevate the people.

Thus it is now: a few whom we call educated men lead the way. They are strewing monuments of their genius on every hand to encourage the people on. Railroads and steamboats are palpable objects. Every body must see them. They come to our very doors. They shriek in our very ears. We look, and look, and never tire. Who can estimate the vast influence of railroads on civilization, running to and fro over entire continents as they soon will do! National prejudices are passing rapidly away, even now, before their onward march. The iron rail binds many hostile nations together. Each rail is a bond of love, drawing the people into intercourse, into intimacy with each other, which in intercourse and intimacy naturally beget esteem and love. In Europe a peasant may dine with his national enemies, and return to tell his children at night how polite and kind hearted are the foes of his country. His father had terrified him in youth with tales of strange cruelty. He has seen the monsters of those tales, and found them like himself, human and kind. By the cheapness and ease of traveling, railroads have rendered another important serv-

ice to humanity. The large cities, the seats of science and art, are now made accessible to the countryman. Were it not for railroads, the yearly exhibitions of art and science could be patronized only by those dwelling in the vicinity. By means of the cars, the masses now mingle together freely. Sectional prejudices and local animosities can not long exist where there is familiarity. I look upon the railroad with admiration. It is the harbinger of better times.

A locomotive is an object of beauty. It is also a monument of civilization. The very appearance of one in any village is stimulating to genius, and promotive of intelligence. You may ask, what has this to do with the subject under consideration? Much, every way.

We have touched upon one only of the external effects of education. We have but dimly portrayed its influence on man. Need we speak of other effects? Need we speak of the conveniencies, the luxuries of life; of the loom that weaves the nicest carpets, and the little instrument that sews them? Need we mention statuary, printing, books of every kind, and show their effects upon us? We will only ask, whence come all these? They came from the scholar, from the educated man—is the only answer that can be given. Contrast our condition with that of savage nations, and what do we find as the exponent of our superiority? Is it not the conveniencies, the comforts of life that surround us on every hand? The educated man has given us these. By these comforts we are rendered happier and better. If we were born savages, unquestionably we should be savages to-day. We were born for a happier destiny by looking upon a better condition when first we saw the light.

But we must hasten to the other part of the subject. We are here to speak of the effects of education on the morals and manners of men. And when we mention or speak of the truly educated man, we do not mean those men who have studied one branch of knowledge only. Such men are generally styled self-made men. We exclude them, from the fact that they have too palpably overlooked the highest end of education. They may well represent their condition by the words of the poet:

“We do squint
Each through his loophole, and then deem heaven
Is but the patch we see.”

Men truly educated exert a chastening influence wherever they go. Their whole course of study has been ennobling. It has brought them into immediate connection with the harmony of nature. Studying as they must the principles of all the sciences, they can not but derive great benefit from the congruity and order that pervade them. Their passions are less strong, their desires less ardent from this very study of harmony. The power of education to soften the manners and smooth the asperities of character is of vast consequence to morality and religion. The educated man must be gentlemanly and kind to all. His education teaches him this. And by the constant exercise of these higher and better traits, he exhibits a beauty and symmetry of character which the uneducated can seldom attain, but which they must always admire.

Again, an educated man is brought into association with the master spirits of the past by means of books. These books contain the choicest thoughts and feelings of past generations. In this way he becomes acquainted with the valuable lessons which the past teaches. And, laying these lessons to heart, he looks upon men as brothers, though often erring and fickle. He treats all men with kindness and esteem, find them where he may. From his treasury of knowledge he brings forth enough to win the confidence of all who know him. Moreover, rendered commanding by the strength of his mind, by vigor and clearness of thought, and also rendered courteous from his knowledge of men, the influence of the truly educated man must be great and abiding in the society in which he moves.

By cultivation our sympathies are also enlarged. We feel the joy and pain of others as much as our own. The savage has few wants and few joys. To eat and to sleep are his pleasures. With an educated people the case is very different. There are a thousand little things, which we can not name, that go to make life pleasant. If they are wanting, life is a burden. These the educated feel and supply. By the number of these wants we may judge of a nation's advancement.

But the effects of education on the external man can not be better illustrated than by contrasting two communities, the one intelligent, the other ignorant. The former is generally virtuous: the latter vicious. Thrift and plenty mark the former. Theft and squalor characterize the latter. The former treats a stranger with attention, and opens its library to him: the latter treats a stranger

with coldness, and leaves to him the solitude of its streets. The members of the intelligent community invite the stranger to their homes, talk to him of new publications, of the advance in science, of some discovery in art, and entertain him with music: the members of the ignorant community congregate on the street-corners to see the stranger pass, soil his boots with their vile expectoration, greet him with a vulgar laugh, and leave him with an oath. On the Sabbath the former go to church: the latter meet at the village bar-room. The former sing psalms to God: the latter tell their ribald stories. The former are sociable, polite, and pleasing: the latter are unsociable, rude, and disgusting. This imperfect contrast will appear in its true light, if you examine but slightly the communities around you.

We will add, in concluding this very imperfect sketch, that a nation is indebted to educated men for its prosperity. The world must look to them for the amelioration of society, for improvements in science and art, and for the removal of error and darkness from the minds of men.

THE DESIRE OF KNOWLEDGE, AS A MEANS OF EDUCATION.

DUGALD STEWART says, in his *Active and Moral Powers of Man*, that "A strong curiosity, properly directed, may be justly considered as one of the most important elements in philosophical genius; and, accordingly, there is no circumstance of greater consequence in education than to keep the curiosity always awake, and to turn it to useful pursuits."

A desire of knowledge, or the principle of curiosity, manifests itself very early in children. Hence the eagerness with which they examine everything new that is placed in their hands. Let the father announce to his little children that he has brought with him, from the toy-shop, a very beautiful and curious toy, which he intends to show them on the morrow, and with what anxiety will they seek to find out what it is? Young children are delighted with the stories of their grand-mother and grand-father, and will sit in almost breathless silence for an hour, listening to the narration of some bold adventure. At a more advanced age, the desire of knowledge is not so strong, in a greater number of children.

The young plant quickly shoots from the ground and looks thrifty for a few days, but for want of proper culture it is soon choked with weeds, and comes to naught.

By a singular process, the father of Dr. Alexander Murray, the celebrated Orientalist, cultivated the desire of knowledge in his son. The old gentleman purchased him a catechism, but "as it was too good a book," using his own language. "for me to handle at all times, it was generally locked up, and he, throughout the winter, drew the figures of the letters for me, in his *written* hand, on the board of an old *wool card*, with the black end of an extinguished leather stem, or root, snatched from the fire. I soon learned all the alphabet in this form, and became writer as well as reader." He was taught that a book was no trifling thing; and knowledge was held out to him in an attractive garb.

I once had a boy about twelve years of age, to attend my school, who had never attended school before, notwithstanding he could read and spell, but could not pronounce well. He told me that his mother had taught him his letters, and to spell a little but that his step-father had often punished him for using his book. He could only learn by stealing away to the cornfield or barn, which he frequently and habitually did. Owing to the encouragement he received from his mother and friends, and the discouragement from his step-father, he had acquired an inordinate desire of knowledge; so that in one term of school he advanced farther than others who had been attending two years.

If parents only knew the strength of this desire, and how to cultivate it, and would take the pains, wonders could and *would* be worked in the field of knowledge. Children, when young, are inquisitive and often weary the patience of their parents by asking them questions, which seem to them frivolous, and many of which they can not answer. Too often in such cases the parent discourages the child from asking others, and thus by the time he is able to be sent to school, his desire of knowledge has become inactive, and he is an inattentive, stupid child. It is true that the desire is so strong in some children that it will not in this way become inactive, but as a general thing it will. Sir Isaac Newton was a dull boy in the school-room till the age of twelve, when he had his ambition aroused, which awakened the desire of knowledge. The desire of knowledge seems to have been awakened anew at an early age in Daniel Webster, by a sympathy for his father when he was an unsuccessful candidate for Congress, and by his father's encouragement.

The skillful teacher will endeavor, by every means in his power, to awaken in his dull pupils an ardent love of learning, and if he succeeds in awakening such a love, he has accomplished more than half the work of educating the pupil. Many of the most eminent men of all ages were remarkably dull and inattentive in their early school-days. Clavius, a great mathematician, was so stupid in his boyhood, that his teacher could do nothing with him till he tried him in geometry. Berzelius, the eminent Swedish chemist, left school for the university, with the words, "Indifferent in behavior and of doubtful hope," scored against his name; and he narrowly escaped being turned from the university. Richard Brinsley Sheridan was pronounced an "incorrigible dolt," by his teacher. Walter Scott was credited with having the thickest skull in the school; and Dr. Scott, the commentator, was not able to compose a theme when twelve years old.

Milton, Swift, Goldsmith, Shakspeare, Dryden, Dr. A. Clark, and many others were quite unpromising in youth. But all these, some by one circumstance and some by another, had the principle of curiosity awakened in them. When this principle is properly awakened, and the mind has sipped of the sweets of knowledge, it is, as it were, made fast, in a tide of investigation that moves faster and faster as it approaches the ocean of omniscience. Dr. Johnson, using his own terms, was so dull and inattentive that the Greek and Latin had to be *whipped* into him. But in after life he needed no such incentive to induce him to perform the greatest literary work that ever has been accomplished in the same time.

When a desire of knowledge is properly awakened, no obstacle will be too great to be surmounted. Humble station is no obstacle, as in the case of Linnæus, Ben Johnson, Hayden, Hayne, Opie, and thousands of others. Extreme poverty is no obstacle, and seems to be rather favorable, as in the case of Erasmus, Kepler, Lagrange, Dr. Parr, Castell, Davies, Humboldt, and many others. Exile or imprisonment is no obstacle. Blindness is overcome with but little effort, as in the case of Milton, Homer, and others. Indeed there is no obstacle, a deep seated desire of knowledge will not surmount. Almost every avenue to the soul may be shut up, and yet the mind *will* go forth from its prison-walls to bask in the sunshine of knowledge, and revel among the varied beauties that are everywhere to be seen in nature.

Let the teachers of our country have the importance of this principle before them, and let them endeavor, by every means, to

awaken an active curiosity in their pupils, and the effect would be great. There is not a country school of twenty-five pupils that has not within it a mind capable of high culture; and if means were furnished, and the right direction given to such minds, in less than half a century many Newtons, Keplers, and Herschels might rise up to astonish the world with their researches.

R. M. J.

SCHOOL VISITATIONS.

No complaint is more common from teachers, than that "parents will not visit the school." Every teacher knows the great influence of parental visits upon the general interest of the school: hence he feels an anxiety to have what he rarely gets. "How shall I get parents to visit the school?" is frequently asked; "not one has called during the quarter." And one Principal of a Seminary stated publicly, on examination day, that not more than three parents had visited it during the year.

The indifference of parents and citizens is a great fault, and much to be regretted, and teachers should set themselves to work to change the habit. The question is asked, *how* can it be done? Like everything else of importance, by hard work and well directed skill.

Experience of some ten years in Public Graded Schools proves to me that the thing is not only possible, but comparatively easy to be attained.

When anything is to be brought about, a teacher should lay his plans carefully, and when formed, steadily execute them.

First, a teacher must waken up his scholars, excite them in their studies, and get up a pride for the school. If he can not do this, he can never reach the community, and had better give up all hopes of success.

If he can succeed in arousing the ambition and energy of his pupils, he may feel confident of succeeding in getting out the parents. After the teacher has created interest among his pupils, let him see the directors and some other prominent men in his district or town. Get their promise to be present at school on an appointed day, invite every parent that he sees to visit the school at that time, give general notice to the scholars that directors, cler-

gy, and parents are coming. Let them be prepared with extra exercises of interest, brisk and varied, such as declamations, concert recitations, and readings, mental arithmetic or geography, and whatever else the age of the pupils will admit of. When the time comes, go through with all the exercises that were prepared. Some will be present, perhaps but few, but a beginning has been made; you have set the people to *talking about the school, favorably*. Appoint another day for similar exercises, and urge all to be present. You have but to tax the ingenuity to vary the exercises, the perseverance to visit parents, and the skill to interest pupils, to secure the attention of every parent.

The teacher who never or rarely sees parents in school, may charge himself with 95 per cent. of the blame for it, and has only to try the experiment suggested, to be convinced of the fact. But few parents will attend merely from a sense of duty. They must be *interested* when they visit, and when pleased, they will not fail to attend, and induce others to accompany them. To teach an efficient school, requires energy, skill, and learning. These, properly directed, will enable any one of ordinary perseverance to succeed; without them, he ought not to engage in a work so important, involving the present and future interest of immortal beings.

J. H.

MORAL INSTRUCTION.

I notice in the last number of the *Journal*, a communication from the "Mass. Teacher," gravely asking various questions on the subject of "morals" in schools. The impression left on my mind on reading it, was that the writer considers it only speculative philosophy to suppose that moral instruction can be practically imparted in public schools, that only visionary teachers speak of it, and that his questions are put with the supposition that they can not be seriously answered; and from its silent insertion in the *Journal*, I was left to fear, that the author's apprehensions were half-echoed.

I conceive the proper answer to these questions too near the basis of correct education, to be overlooked; and shall offer a few sentiments as the result of experience and reflection.

The great source of fear on this subject is the strong antipathy felt to sectarian views; but any intelligent teacher, however much his predilection for a particular religious profession, can find enough to do, without teaching sectarianism; and should he now and then chance to utter a sentiment on a disputed text, I would rather have morality taught under such circumstances, than not taught at all.

The writer says, the "how and when" are with him "of the greatest import." I would answer by saying, make the Bible a text-book, and apply its morality to the little community around. For many years past, I have devoted half an hour each day to Scripture recitation. Take for the lesson, say the second chapter of Matthew. I would endeavor to have the direction, distance, &c., of Palestine fixed on the minds of the pupils. They might have their maps before them and trace it out. Jerusalem should be found as its capital, and Bethlehem pointed out as the city of David, a few miles southward. I would call their attention to the fact of its being a conquered province under the Roman Government; that the Emperor had sent Herod there to be King of the Jews. I would have them hunt up Persia, whence the wise men probably came. They might then refer to the prophecies relating to the birth of our Saviour, and notice their fulfillment, and thus on and on would the subject lead us from day to day. Geography, history, the manners and customs of the Jews, the animals and plants, the nations then upon the earth, their religion and learning; governing my subjects to suit my time and the age of my pupils. So much for a systematic plan—a plan that need no more run into sectarianism than geology or arithmetic. Disputed doctrinal texts can very safely be passed without comment; and a teacher, having the proper qualifications to assume the responsibilities of a school, should be abashed to be ignorant of these things.

Let the Bible be our text-book, for its Author is the Author of nature, and we should never attempt to study one without the other. The things that are seen are continually pointing to those that are revealed, and those that are revealed as constantly point to those that are seen, and both address themselves to our hearts. One of the saddest features of our public school system is, that the Bible has so little place there, when no book should be more prominent or studied with more care, from the Primary School to the University; for it is indispensable to the young and the old, the ignorant and learned, the poor and the rich, the humble and

great, in all the varied incidents and trials of life. It is the great Law-book of individuals and nations, and from it as a text-book of morality there is no appeal. It contains the statutes of the "Higher Law," and to it all human law should be obedient, and for this reason it should be diligently taught to our children. It contains the only authentic record of the origin of the nations of the earth, and is therefore indispensable as a history. While its precepts curb our wild ambition, they become to us a powerful stimulus to imitate the wise and good of other days. Again, the teacher occupies the position in school of law-giver, judge, and executive, and can inflict punishment or grant pardon at pleasure. In all of this he must be a practical *moralist*, teaching his subjects that they must not only obey for wrath's but for conscience' sake. There are most favorable opportunities occurring, which call for an exposure of the human heart. Falsehood, cheating, theft, profanity, &c., often come up on the docket of his court, and the law requires to be expounded. Let him show how sadly the world would get along if all men were to tell falsehoods. Nobody could be trusted. Business must stop. Let him change the picture and show how beautiful a little boy's character becomes when he is always honest and truthful. A teacher should be sure to reach the heart as well as the mind, and make lasting and ruling impressions there, which will bring forth good fruit in other days.

This is my brief answer to the "How" and "When" of the Massachusetts Teacher, who is so morally bewildered; and if he has any doubts of the practicability and correctness of the "*system*," let him and every one else examine the subject to the bottom, and give it a fair trial, and if it have fallacies, expose them as honestly as this is penned.

PARKE.

WHISPERING.

A shoal over which I wish to place a buoy, to prevent running a-ground while sailing under these orders, is—*Communicating in studying hours*. How much trouble has this matter given teachers!

It may be set down as a truth, that communication can not be *entirely* prevented. Even the best scholars will occasionally whisper. They do not intend to violate law, but they "can't help it."

It becomes a question, then, How can we prevent it as much as possible? I answer:

1. By convincing the scholars of the injurious effects of communication, on themselves, individually, and on the whole school. This may be done by frankly reviewing, with them, the results of allowing free communication, and discussing plans for avoiding such results. They can be made to understand how that whispering, by leading to talking, and that to playing, is at the foundation of general disorder, by a story like this:

"Holland, you know, is a very low and flat country. Much of it is below the level of the sea. Were it not for the extensive embankments which have been built by that industrious people to keep out the sea, the whole country would be only a vast salt marsh. Instead of roads they have canals. These are very easily built, and are supplied with water from the sea, which is let in through great wooden gates, built in the embankments. In spite of all their care, inundations sometimes happen, which do immense damage. When the tide is high, the water dashes against these sand-banks; and although at first only a little breach is made, yet the loose sand gives way by degrees, until, occasionally, it works a passage, and pours in with resistless fury, washing everything before it — houses, cattle, people, and all. They prevent such deplorable accidents only by great care in watching for the first appearance of a break, and immediately stopping it up.

"One night, a little Hollander, about six years old, was coming home very late. He had been away for the doctor, for his mother was sick. As he was passing along near one of the embankments, he heard the trickling of water. It was so dark that he had to hunt around for some time before he found it, but at last he discovered that between the side of one of the gates and the bank, there was a little hole worn, through which the water was trickling in quite a stream. He was a little fellow, but he was wise enough to know that if the water was left to run long, it might soon wear a larger hole, and very likely burst through in a regular inundation before morning. He tried to stop the hole with sand and little sticks, but the water still trickled through; he couldn't find anything, in the dark, which would stop it; so what did he do? He thrust in his little fist, and that stopped the water effectually.

"But after awhile he began to grow sleepy and chilly. He wanted to take his hand out, for his arm ached, and he thought of

home and his warm bed. But, like a little hero as he was, he stood to his post. His head nodded, and he almost got to sleep; but the thought that he was saving so much danger and trouble to his own family and the whole village, and perhaps the whole country, gave him strength, and he stood to his post!

"In the morning, very early, his friends and neighbors, who had started out to look for him, found him nodding and shivering at the gate, but still at his post. You may well believe that they were delighted with the prudence and bravery of the little fellow. And it was not long before the whole country heard of it, even the king himself, who ordered a monument to be erected to his honor, and, on the top of it, a marble statue of the little hero.

"Now, boys, let's find the *moral* of this good story. The inundation of disorder in a school generally trickles through a little *whispering hole* that each of you have, just under your noses. And that boy who really wishes to do his part in preventing the potting in of a whole sea of talking and laughing and playing, will do his best to stop up the whispering hole. In other schools that you have been at, haven't you observed that if the boys were allowed to whisper as much as they pleased, they generally went farther, and became very disorderly? Now, I know that it is rather hard *not* to whisper, if you have been in the habit of it, but are you not willing to try to abstain? Very soon you will get *used* to being silent, and it will be *easy* to be so; you won't think of it at all.

"Boys, you know that I am something of a boy myself. I like play about as well as any of you, and I *believe* in playing, and playing *hard*, and having real '*fun*,' but only in *play-hours*. Just *think* a moment. You play until nine o'clock, and then for only an hour and a-half—only ninety little minutes, you are in school; then comes a recess, full of play; then another ninety minutes, and a noon-time, for play; and it's just so in the afternoon. Now am I not *reasonable* in asking you to abstain from whispering—which *leads* to playing—for only an hour and a-half at a time? Am I not *reasonable*?"

A talk like that will convince a large majority. For the remainder we must have—

2. Some arrangement like that of short recesses of five minutes, every half hour, for whispering, without leaving seats, or, at least, forms. Get all to agree to this; to promise, on their honor, not to whisper during study hours, if you will give them *these* recesses. But you must control stubborn cases by—

3. *Marking* for whispering, on the ground that although whispering, *in itself*, is not a great offense, yet because it *leads* to worse conduct, because almost all wish to join with you in breaking up the habit, and because the short recesses afford all necessary time for it, it must be regarded as a markable offense.

I have in this way procured a state of things in my school which was gratifying and a source of pride. — *Root's School Amusement.*

SCIENTIFIC ITEMS.

THE MÆLSTROM.—This word is said to mean mill-stream, probably from its (not the word but the Mælstrom) whirling like a mill-stone, and crushing or breaking whatever is thrown into it. The Mælstrom is said to be situated near the southern extremity of the Loffoden Isles, and is called "a great whirlpool, a mile and a half in diameter, which sometimes draws within its vortex ships, as well as whales and other animals, and dashes them on the rocks beneath." Baldwin, in his *Gazetteer*, quotes *Goodrich's Pictorial Geog.*, p. 782, for the following :

"An American Captain who visited the Mælstrom, some years since, says there 'is evidently a subterranean passage.' He adds, 'I should not doubt that instant destruction would be the fate of a dozen of the largest ships, were they drawn in at the same moment.'"

The following stanza is from Campbell :

"Round the rocks, where loud Loffoden
Whirls to death the roaring whale;
Round the hall, where Runic Odin
Howls his war-song to the gale."

Mitchell in his *Geography* says: "Near the Loffoden Islands there is a terrific whirlpool in the sea, called the Malstrom or Mælstrom, (Grinding Stream,) which sometimes draws in and destroys ships, as well as whales and other animals."

Smiley says: "The Loffoden Islands, on the coast of Norway, form a chain parallel to the coast, from which they are separated by narrow channels, through which the tide rushes with tremendous velocity, by which the celebrated whirlpool, called the Mælstrom, is formed."

Olney says: "Near the coast of Norway, is the terrific whirlpool, called the Mælstrom. It can be heard at a great distance, and is so violent that every thing which comes near it, is drawn in, and dashed in pieces."

In Parley's Panorama there is a cut representing the Mælstrom in the act of swallowing a ship. This cut is much more terrific in its effect than the one in Olney's Geography.

Goodrich, in the description which follows this cut, says: "The Mælstrom is situated between the Lofföden Islands, and is caused by the tides; though its terrors are sometimes greatly increased by the winds. The roar of the sea, when the Mælstrom is in full action, is said to be terrific. It is stated that not only ships, but even whales, have been sucked into this vortex, and killed by being dashed against the hidden rocks."

He then gives a description, which, though imaginary, he says "gives a correct idea of the destruction of a ship in this whirlpool." The description is very much like some we have heard given by ministers, when attempting by an eloquent illustration to warn the wicked of their danger. Mr. Goodrich then closes with the following paragraph:

"The water of the whirlpool is said to be 250 feet deep, and at ebb its noise is as loud as a cataract. In 1645, it was so violently agitated by a storm, that in Moskoe the houses were so shaken as to cause the stones to fall to the ground. Fragments of vessels wrecked in the Mælstrom are frequently seen on the coast, brought up by the return of the tide—their edges mashed and jagged as with a saw, which would induce the belief that the bottom is composed of sharp rocks."

The reader may, by this time, be inclined to ask why we have quoted all these statements in reference to that of which he has often read? We answer, because there has been an attempt made to show that it is all romance. A correspondent of the *Scientific American* says:

"I have been informed by a European acquaintance that the Mælstrom, that great whirlpool on the coast of Norway, laid down in all geographies, and of which we have heard such wonderful stories, has no existence. He told me that a nautical and scientific commission, composed of several gentlemen appointed by the King of Denmark, was sent to approach as near as possible to the edge of the whirlpool, observe its action, and make a report. They went out, and sailed all around and all over where the Mælstrom

was said to be, but could not find it; the sea was as smooth where the whirlpool ought to be, as any other part of the German ocean."

It seems to us that the correspondent has been made the subject of a joke. Can it be possible that there is no more foundation for the story of the Mælstrom than for the "Sea-Serpent?" We quote the following comments on the European's story:

"We presume the above is correct. The latest geographies and gazetteers barely allude to the Mælstrom. Colton, in his large atlas, gives the site upon his map, but does not allude to it in his description of Norway. *Harper's Gazetteer*, in its article on Norway, says that 'among the numerous islands on the west coast there are violent and irregular currents, which render the coast navigation dangerous. Among these is the celebrated Mal-Strom, or Meskenæs-Strom, the danger from which has been greatly exaggerated, since it can, at nearly all times, be passed over, even by boats.' The romance of the Mælstrom has been pretty effectually destroyed."

We grant there has most probably been exaggeration, yet we must have well authenticated testimony to cause us to believe that the Mælstrom has no existence.

We take the following from Vol. VIII of the *Encyclopedia Americana*:

"MÆLSTROM, OR MOSKOE-STROM; a whirlpool in the North Sea, near the island of Moskoë. In summer, it is but little dangerous, but is very much so in winter, especially when the north-west wind restrains the reflux of the tide. At such times the whirlpool rages violently so as to be heard several miles, and to engulf small vessels, and even whales, which approach it."

Cornell's High School Geography, a work but recently published, says: "Near the south-east extremity of these islands [Loffoden], is the remarkable and dangerous whirlpool, called 'the Mælstrom.' In winter, during storms from the west, the most frightful waves are raised, and the noise of the agitation is heard at a great distance. At these times, it is necessary for vessels to keep at a distance of several miles, lest they be drawn into the vortex and destroyed. This whirlpool is produced by strong currents, which flow first in one direction, and then in the opposite, during alternate periods of six hours, and which cease at high and low water."

If we suppose the story of the Danish commission to be true, it still does not follow that there has never been a Mælstrom near

the island of Moskoe, but only that it was not in operation at the time the place was visited. Is the romance exploded?

THE HIGHEST MOUNTAIN. — The first measurements, barometrical and trigonometrical, of the Himalaya Mountains, were made with imperfect instruments, by Colehooke and Capt. Webb. They gave 26,872 feet as the height of the White mountain, or Dhawala-Giri, the Mont Blanc of the Indian Alps. Blake, who corrected their measurement, gave the height 28,015. This mountain was considered, for some time, the highest on the globe. Several years ago Khunchinjunga acquired the same reputation, its height being said to be 28,156 feet.

In the Annual of Scientific Discovery, for 1857, we find the following, which robs the robber of his laurels:

"It appears from a late survey made of the Himalaya range, by Col. Waugh, that the Khunchinjunga, which has been hitherto supposed to be the highest summit, is in fact not so — a higher mountain having been discovered, situated between Katamandoo and Khunchinjunga. This last named is 28,156 feet above the level of the sea; but the new summit reaches the enormous height of 29,002 feet. It has been proposed to call this Mount Everest, after a former surveyor-general of India."

W. D. H.

MATHEMATICAL DEPARTMENT.

W. D. HENKLE, Editor.

SOLUTION OF No. 30.—BY JACOB STAFF.

Suppose the problem solved, and ABC to be the required triangle, AB being the base, AC the longer side, and CD the given bisecting line. Produce CD to E making $DE=CD$, and draw AE which will be seen to be equal and parallel to BC . The angle CAE is known because it is equal to two right angles minus the given angle ACB . Therefore in the triangle ACE we have CE , the difference between AC and AE and the angle CAE , whence it is easily constructed, thus giving AC and AE or BC .

[This problem was solved by *Stribbling, Stevens, Staff*, and *McFarland*. *Geo. D. Hunt's* solution was wrong.]

No. 31.

Mr. Stribbling writes that this results in a biquadratic, which he does not care about solving.

Prof. Robinson says: "I would reduce the given number by dividing each by 10, but still, the resulting equation will contain high co-efficients prime to each other, and the solution requires too much space either to write out or to print."

Judge Clark, however, has performed the labor and sent a full solution, for which we tender our thanks. He gets the following equation:

$$x^4 - 240x^3 + 11100x^2 + 696000x = 31080000$$

in which x = the part of the piece broken off that is below a plane which is horizontal and tangent to the top of the mound. One of the positive roots of x in this equation he says is 37.56+, whence by substitution 38.79 is found to be the length of the part left standing.

SOLUTION OF No. 32.—By WM. DOWNS.

From the conditions we know the radius of the circumscribing circle. Supposing the thing done, AH being the longer segment of the base, BH the perpendicular from the vertical angle, and O the center of the circumscribing circle. Draw OE parallel to AH , meeting BH in E . It is evident that all the change that can be made in AH and BH by the different positions of the vertex B is just what is made in DH and BP , because AD and OD or EH (D being the middle of the base) are constant. Hence we have only to know when the sum of OE and BE is a *maximum*, which is easily proved to be when $BE = OE$, or when $\angle BOE = \frac{1}{2}$ a right angle, whence the construction is apparent.

[This problem was also solved by *Stribbling, Staff*, and *Judge Clark*. *Prof. Robinson* solved it by calculus, and deduced the interesting fact that "the perpendicular must *vary* as rapidly as the smaller segment of the base, provided a slight change be made in the position of the vertical angle."]

SOLUTION OF No. 33.—By J. POOL.

By dividing 80 lbs. in the ratio of 7 to 3, we obtain 56 lbs. &

copper and 24 lbs. of tin. Now in order that there may be 11 lbs. of copper for every 4 lbs. of tin, since there are 6 times 4 lbs. of tin, there must be 6 times 11 lbs. or 66 lbs. of copper. Hence there must be added 66—56 or 10 lbs. of copper.

[This problem was solved by *Jos. A. Morrow, Geo. D. Hunt, Kenneth Wharry, O. A. Brownson, and M. C. Stevens.*]

No. 34.

[*Prof. McFarland* thinks this problem is not possible. We would here remark that this conclusion is in accordance with a theorem in *Euler's Al.*, p. 450, which says: "*It is impossible to find any two cubes, whose sum, or difference, is a cube.*" We are not prepared, however, to admit the complete rigorousness of the demonstration, although the theorem may be true.—ED.]

SOLUTION OF No. 35.—BY D. C. STUBBS.

The average height to which the water must be raised is 21 ft. 18 ft. of water raised 21 ft. is the same as 1 ft. of water raised 378 ft., and the average height to which the 4 ft. are raised is 14 ft. 4 ft. of water raised 14 ft. is the same as 1 ft. raised 56 ft., which the man does in one hour. It will take him as many hours to raise 1 ft. 378 ft. as 56 is contained in 378, which is $6\frac{3}{4}$. Therefore it would take him $6\frac{3}{4}$ hours to empty the well.

[This problem was also solved arithmetically by *H. N. Robinson, J. Pool, M. C. Stevens, and Judge Clark.* Messrs. Robinson and Pool solved it by arithmetical progression. *Geo. W. Hayes* and *I. N. Terwilliger* obtained 10 hours and 50 minutes, instead of $6\frac{3}{4}$ hours. *P. F. Reece* obtained 7 h. and 5 m. A solution by Calculus will be given in next number.]

PROBLEM No. 37.—BY THE EDITOR.

A tailor offered his customer \$5 per yard for all the cloth left of his pattern; and the coat being made, the latter asked what was left. The tailor answered, "If you had got $\frac{1}{2}$ of a yard square more, you would have had $\frac{1}{2}$ of a square yard left; and if you had got $\frac{1}{2}$ of a square yard less, you would have had $\frac{1}{2}$ of a yard square too little. How much cloth was left?"

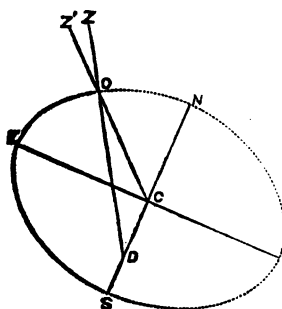
PROBLEM No. 38.—BY LENMEL.

What three figures multiplied by 4 will make precisely 5?

PROBLEM No. 39.—BY E. M. STRIBBLING.

In a given circle to inscribe three unequal circles, touching each other, and each touching the given circle.

PROBLEM No. 40.—BY H. N. ROBINSON.



A certain Prof. in the U. S. Navy has given a new method of working *Lunars*. The moon's horizontal parallax, in the Nautical Almanac, corresponds to the line E C. Suppose an observer at O. This Prof. adjusts his parallax to correspond to the line O D, and not to O C, as others have done. Is the Prof. right? Z is the true zenith for the observer at O. Z' corresponds to the reduced latitude. If

he is correct, is the true place of the moon seen from D, or from C?

PROBLEM F.—BY JOHN FAREY.

There is a mould candle 15 inches long, which will burn 9 hours; and one inch at the lesser end will be consumed in 20 minutes less than the same length at the larger end. In what time will an inch at the lesser end be consumed?

PROBLEM G.—BY JOHN RYLEY.

There is a cistern whose length is 6 feet, the breadth 4, and the depth 5 feet; it is supplied with water by a pipe, which will fill it in 20 minutes; it has also another pipe by which it may be emptied in 45 minutes. Now suppose the cistern empty, and both pipes to be opened: in what time will it be full?

ACKNOWLEDGMENTS.—Just after we had written the above, we received from Mr. Samuel Alsop a long letter containing solutions and comments on all the problems in Vol. I, except those in the last two numbers, which failed to reach him. He has recently become a subscriber, and we anticipate in him a valuable contributor. Did space permit, we would be glad to insert some of his

comments on the problems of last year. Of this year he has sent solutions to Nos. 28, 29, 32, and 33, and says No. 34 is impossible. *Robt. McCurdy* and *J. F. Bird* have also solved No. 28.

TO OUR CORRESPONDENTS.—The preparation of the mathematical department has become quite laborious, and this labor can not be diminished except by your complying with the following request: Write on but one side of the paper, and to every solution and problem proposed, put your name, as is done in the *Journal*. This will enable us to cut off what may be used for any number, and throw it aside, so that we will not be compelled to look at the same letter several times to cull out what we want.

EDITORIAL MISCELLANY.

JUDGE PERKINS AND THE INDIANA SCHOOL JOURNAL.

Our readers well know that we do not occupy our pages with puffs of the *School Journal*, but the following article from the Hon. S. T. Perkins, one of the Judges of the Supreme Court of Indiana, is certainly worthy of the attention of teachers, and we therefore give all whom it may concern, Judge Perkins especially, the benefit of our circulation. We make no reply, for none is needed, and we leave it to our readers to make such comments, and draw such inferences, as the article seems to demand. We will only say, that Gov. Slade has never sent any, except *female* teachers, to the West. We doubt whether either Mr. Hurty or Mr. Cole have ever seen New England; we are at least sure that they have never resided there, and were probably employed in teaching in the West, while Judge Perkins was yet practicing law in Berkshire county, Massachusetts, of which State he is a native, and where he resided for many years.

The article was originally written for the "Richmond Jeffersonian," and was afterwards copied into the "Daily Sentinel," of this city.

"INDIANAPOLIS, April 20, 1857.

"DEAR JEFF.—I see by the last number of our *School Journal* that Mr. Hurty, of your city, has been appointed agent of the State Teachers' Association, in place of E. P. Cole, late of this city. The change is unimportant, as both of the men seem to be self-important, rabid, Kansas-screaming Abolitionists. Such appears to be Hurty's character, as given in the Richmond papers—such, I infer, to be Cole's, from his flings at the South in the *School Journal*—a publication, unworthy, from its partisan bearings, of the patronage of the people of the State. The truth is,

the success of our attempt to establish free schools in this State is likely to be endangered by the efforts of Abolitionists to convert them to partisan purposes. The teachers of our children are mostly picked up by that old school abolitionist, Slade, of Vermont, and shipped out here, from that great cess pool of treason, freesoilism, Abolitionism, Atheism, and a Kansas-screaching, adulterous clergy—New England—the section that voted for Aaron Burr and Fremont; and against their country in the war of 1812; while the Republicans here manoeuvre to get them employed in the schools, and secretly stimulate them to teach their *isms* in school, and insult those children of Democrats who will not swallow them. There are, I wish to say, some good and patriotic men and women in New England, but Slade don't ship them out here.

INDIANA SCHOOL JOURNAL.

“For the first time, we have just seen the *Indiana School Journal*, now 16 months old. We have it in our heart to say a great many things about it, but our recent acquaintance will not allow it. It is printed by Cameron & McNeely, Indianapolis—of course it is printed well. It has nine editors, of whom G. B. Stone, Indianapolis, is chief—of course it is edited well. But is it *supported* well?—that is the question. It ought to be in every school teacher's library. Is it? We do not say that every school *keeper* should have it—a great many *keep* school who never teach anything—just let it teach itself—they don't even learn anything themselves. School *teachers* are always *learners*, and all such should have the *Journal*. Price, \$1 per year. Address G. B. Stone, Indianapolis.”

The above article taken from the *Indiana American*, a valuable weekly formerly published at Brookville, and now at Indianapolis, we take as the heading for a few words concerning the *Indiana School Journal*. The subject of a State Educational Journal had been broached at the meeting of the State Association in Indianapolis, December, 1855. A Committee was appointed to consider its practicability, and report at the annual meeting at Madison, in December, 1856. At that time pledges for 476 copies of the work were made, and Winthrop B. Smith, of Cincinnati, offered the liberal donation of \$200 for its support.

With this limited prospect the publication of the *Journal* commenced. The whole number of subscribers during the first year was 797. Of these 797, about 150 were obtained by an Agent, who was appointed by the Executive Committee of the Association, in accordance with a vote passed at the semi-annual meeting at Lafayette. The good work which this Journal has done, was seen in the large meeting at Indianapolis in December last, and in the greater degree of interest and hopefulness in regard to educational matters which was then manifested. When the subject of the Journal came up, pledges for 800 copies were given, and the subject of a State Agency, recommended by the Resident Editor in his report, was taken up with earnestness and enthusiasm, and the Executive Committee

was instructed to employ an Agent as long as funds could be raised for his support. The duties of this agent were, to visit all sections of the State, lecture, hold Institutes, form County Associations, interest school directors and influential men in regard to free schools, and in the course of his work to obtain as many subscribers as possible for the *School Journal*. Money was subscribed by the teachers to defray his expenses, many pledging from one to two per cent. of their salaries.

The expense of this agency during the year will be not less than \$1,500. Already its good fruits are apparent. In some places free schools have been opened with good prospects of success, in others money has been raised by subscription for building school houses, and taxes for the same purpose have been levied, where but for the visit of our Agent nothing would have been done. Is not this a cause worthy of the support of any liberal and intelligent man in the State? Is it not a cause which appeals to all our citizens as strongly as to teachers? So much for the State Agency—its purposes, and the means by which it is sustained.

The *School Journal* commenced its second year with an edition of 1500 copies. The January number is entirely exhausted, and as we have already received from 50 to 75 subscriptions which wish to commence with the beginning of the volume, we are having that number re-printed, and shall send it to such subscribers with the present number. This shows the condition of the *Journal*, and while we have every reason to be satisfied with what has been already done, we must appeal to teachers and friends of education to aid us in increasing our circulation. The expenses of the State Agency are a heavy burden upon us, and we need a large addition to our list in order to meet them. Those who made pledges should feel themselves bound to fulfill them, and this should be done early in the year. Many have already redeemed the pledges, but some have not yet sent us a single name. Those friends who, unpledged, exerted themselves in our behalf, will accept our sincere thanks. We have thus briefly stated the condition of the *Journal*, and hope that teachers and others seeing what the Association is laboring to effect, will give *substantial* assistance to the cause.

PUBLIC SCHOOLS.

Mr. Hurty, of Richmond, delivered an address at the Court House, on Thursday evening of last week, to a portion of our citizens, on education. He is traveling under the auspices of the State Teachers' Association. His speech was an able one, and was well received by all who were present. He made some excellent points, elucidating the importance of free schools, and the necessity for elevating the standard of education. He assumed that three things were essential to good schools—good houses—good teachers—and good communities. He dwelt on each of these propositions at considerable length.

He maintained that the masses in this country can only be properly educated by a well regulated system of free schools. His doctrine is, that

the wealth of a State is its population; and that every child of the State is entitled to an education. He showed that the expense of sending ten scholars abroad to be educated, would cost the citizens of our town enough to keep up a first class school for ten months in a year, in Rushville, which would accommodate every child in the town. He doubted the policy of sending children from home to be educated. He showed the effects of good schools, on towns and cities, in the price of property, the increase of population by the settlement of substantial citizens to avail themselves of educational advantages, and in their growing prosperity. He gave numerous instances in proof of his assertions.

He complained of the neglect of communities of the schools they have, in failing to visit and encourage them as they ought. He said men paid great attention to feeding mules, cattle, and hogs, and exhibited much pride in their improvement; but they seldom visited the school to see how their children were improving.

Mr. Hurty's speech was plain, practical, and pointed. The questions discussed by him were of the very essence of the subject. He attempted no display, no rant or bombast; but he talks right on, and to the point. He promised to pay us another visit. Should he do so, we hope to see the Court House filled to overflowing.—*Rushville Republican*.

NOTES BY THE WAY.

We next visited Union county, where "Liberty and Union are inseparably connected," but where the spirit of "free public schools," we fear, has not yet fully pervaded the whole population. We found a worn-out, dilapidated, forsaken relic of an old County Seminary, the best facility the town of Liberty possesses for the education of her children. But we found noble minds and warm hearts to welcome us in our enterprise. Rev. Mr. Montfort, M. Hollingsworth, and many others, took a deep interest in calling the attention of the people to the subject of education. After the lecture in the evening, to a large audience, the meeting resolved itself into a committee of the whole, and discussed their unfortunate condition in matters of education. A meeting was called for next morning, and at the time appointed, a large number of prominent business and professional men convened. After some discussion, a committee of nine persons, representing various classes of society, was appointed to devise ways and means to establish such schools as are requisite to secure the proper education of all the youth in the town. We visited Dunlapville, where we found our noble co-laborer, R. B. Abbott, holding an examination. This school is doing a good work for the cause of education, but we fear the Presbyterians, who founded it, do not understand their true interest, or they would afford more "material aid" as well as patronage.

By the assistance of Mr. Cole, a County Teachers' Association was formed, of which Mr. Abbott was elected President, and over 30 subscribers for the *School Journal* obtained.

Fayette county next: Connersville is a neat, thriving town of 2,000 inhabitants—bounded by a fine ridge of hills on one side, and a rich flat on the other. Here we found our friend Jenkins, one of Ohio's sons, having some of the genuine Buckeye spirit, though laboring under very unfavorable circumstances. His school is well patronized, notwithstanding the wretched condition of the school-room—a damp, dark basement.

The true spirit had been awakened here before. The Board of Directors, Burk and Hall, have erected a noble school building, about seventy feet square and three stories high, which will be completed this year, and a *free school* opened. Such noble men as we found here, are not found everywhere. For two evenings, fine audiences assembled to listen to what was said on the subject of "general education and free schools."

Most of the teachers in this county usually follow other pursuits during nine months of the year, and *keep school* the remaining three. They have but little use for knowledge, and none for the *School Journal*. We met here *one* opponent of our free schools and the school system. He said "there was *no* free school fit to send a child to." A little more knowledge and a heavier stock of good common sense would do *him* good. He was opposed to *all tax* for schools.

Rush county was visited next. This is also a rich county. But when you look for fine school buildings in Rushville,

"He truly must have optics keen,
Who sees what is not to be seen."

We found here good spirits, and true, and received a hearty welcome from some of nature's noblemen. Among them, the editor of the Rushville Republican, Read, Mr. Stuart, Dr. Sexton, Geo. Hibben, and others. The people present, by acclamation, invited us to visit them again, which we agreed to do. Better times are coming for schools in this county, we doubt not. Everywhere, we have received warm greetings and cordial hospitalities from friends of education. Many of the most intelligent and enterprising are expressing the highest gratification at the course the State Teachers' Association is pursuing to promote the cause of education. Rushville was the field of labor formerly of that *live teacher*, G. A. Chase; his labors will be long spoken of with commendation by the people.

Shelbyville has a good "Graded Free School," a fine building, well finished; a neat yard well fenced, and a good corps of teachers. The school is characterized by fine order. While visiting the different rooms, I saw but *one* case of disorder. All is gentleness and decision on the part of teachers, and pleasant obedience from choice, on the part of scholars.

The people of Shelbyville are proud of their school, and deservedly so. E. G. Mayhew, Mr. Gorgas, and others, are active in the free school interest. Had every town in the State such men and such a school, Indiana would soon present a different character from what she now does.

J. H.

LIBERTY, April 2, 1857.

Pursuant to notice, the citizens of Liberty met at candle-light at the Presbyterian Church, and organized by electing L. D. Sheets, President, and B. F. Brookbank, Secretary. The object of the meeting was stated: to hear a lecture on education and educational facilities, from Prof. Hurty, of Richmond. Mr. Hurty being then introduced, addressed the meeting at some length in a very able and interesting manner.

Prof. Cole, of Evansville, was also present, and addressed the meeting, much to their edification.

On motion, the meeting adjourned to meet in the same place on the 3d inst., at 10 o'clock, A. M., for the purpose of further considering educational interests, and organizing a Teachers' Association for Union County.

At the proper time the citizens met, pursuant to adjournment.

On motion of Mr. Hollingsworth, a Committee of nine was appointed to prepare and report to a future meeting, a plan for establishing a permanent High School in this place.

The citizens' meeting then adjourned to meet on the 4th inst., in the basement of the Methodist Church, at 2 o'clock, P. M.

On motion of Rev. Mr. Monfort, the meeting then resolved itself into a Teachers' Association, by the appointment of the same officers, temporarily.

Prof. Hurty being called upon, briefly presented the object of the meeting; after which, on motion, Prof. Hurty, Cole, and Rev. Monfort were appointed a Committee to report a Constitution and By-Laws for said Association; whereupon, the Committee, through Prof. Hurty, reported a Preamble and Constitution, which were separately considered, and adopted.

On motion, Prof. Hurty and Cole were invited to further address the meeting. They responded in interesting practical remarks on the object, plan of operation, and the effects of these auxiliary Association.

On motion, the Society proceeded to the election of permanent officers.

Prof. Abbott, of Dunlapville, was elected President; H. Van Eton, Vice President; B. F. Brookbank, Secretary; A. Bates, Treasurer; and Abbott, Hollingsworth, and T. W. Bennett, Executive Committee.

A vote of thanks was tendered to Messrs. Hurty and Cole for their able and efficient services rendered in effecting this organization.

On motion, adjourned to meet in the basement of the Methodist Church on the 2d Saturday (9th) of May next, at 10 A. M.

L. D. SHEETS, President.

B. F. BROOKBANK, Sec'y.

A SUGGESTION.—Would it not be a good idea for the Township Board and District Directors to make it a part of their *agreement* with each teacher, that he should spend half the day on Saturday with his brother teachers at some central point of the township, in a species of Town-

ship Institute? Or say on each alternate Saturday. They might make it optional with him to attend or to receive one dollar less wages for each failure. The advantages of such a system are obvious.

Will some of your correspondents expand this idea? J. M. S.
Alamo, Ind.

SPRINGDALE, Cedar Co., Iowa. }
4th month 10th, 1857. }

Editor Indiana School Journal :

The following account of an atmospherical phenomenon which was observed in this place, I send for insertion in the *Journal*, if it is considered worthy of a place there.

At ten o'clock on the morning of 8th month 3d, 1856, a meteor was seen by many in this vicinity of rather an interesting nature. When first seen it was about thirty degrees above the horizon, a little south of west from here, and moved nearly in the sun's path to within about five degrees of the horizon, when it disappeared.

At first it appeared about one-fourth the diameter of the moon, and a stream of glowing white light about three degrees in length terminating in a point, followed it. The nucleus appeared to scintillate as burning iron, and as it descended, the whole seemed to increase in size and brilliancy, till, when about fifteen degrees from the horizon, it burst into a white flame, the uppermost separating as a flame of a heap of dry shavings. But the flame more resembled that of a quantity of wet powder, which increased until it disappeared. Most of the observers say there was smoke attending it. The flame disappeared suddenly with a red flash following, and at the time appeared nearly twice the diameter of the sun. The flame was about five degrees in length.

The day was very clear and the sun shone brightly. As far as my observation and inquiry extended, I suppose this meteor to have been at about the distance of twenty miles, and one and three-fourth miles in height, at the time of disappearing.

This is a phenomenon that is so seldom seen that to me it has been a matter of no little interest.

Very Respectfully,
EDWIN PRITCHARD.

EXTRACT FROM THE MASSACHUSETTS REPORT OF THE
TRUSTEES OF THE SCHOOLS FOR IDIOTS.

Number of pupils for 1856, 62; 36 State pupils 1st of January, 1856, 9 private; 14 State admitted, 2 re-admitted, 1 private; discharged—12 State, 3 private. Four of those discharged were not susceptible of much improvement, being insane rather than idiotic; six were greatly improved in their habits and general deportment; and five had learned to read as well as most children of ten or twelve years of age, being able to do some kinds of work. Of the latter class, three are now at home, one has

turned to the school, his friends paying part of his expenses, and a fifth is working at a dollar a week and board, for her services. Of the pupils now present, eight do not make known their wants; three do not feed themselves; twelve do not dress themselves; eleven can partially dress themselves; twenty can not tie a regular knot; seven are speechless; two can pronounce a few words, but do not form sentences; eighteen know the names of several colors; six can distinguish a few colors; twelve know all the letters of the alphabet; eleven read words of two or three letters; two read simple sentences; eleven read understandingly; twenty-one count ten understandingly; nine perform examples in mental arithmetic; four perform written examples in addition, subtraction, and multiplication; one performs written examples in division; eight have a general knowledge of geography; three have commenced the study of geography; ten can knit; six can sew well enough to work on bed linen and towels for family use; seven sing well and keep good time; five others sing, but have not good control of their voices; eleven are subject to fits. The greatest improvement is probably shown in their habits, cleanliness, and behavior at the table. Gymnastic exercises are of much importance, not only in the increase of muscular strength, but in giving confidence to pupils.

"The researches of Rev. Mr. Bowen, just returned from Central Africa, vie in point of importance and almost of romance, with those of Dr. Livingstone. If there is less of adventure, there is more by far of practical usefulness in the valuable discoveries he has made. He has brought to light a new kingdom, in fact, or rather a series of kingdoms, of a high degree of civilization, in the very heart of Africa, and with whom we might and ought at once to establish a profitable commerce. Two hundred miles back from the mouth of the Lagos river, in the Bight of Benin, lies the kingdom of Yoruba. It contains about 2,000,000 of inhabitants. There are other kingdoms around, similar in character. There are cities as populous as Philadelphia, and civilized in a very high degree, and characterized by an active commerce. *So singularly honest are the people, that it is the custom of the merchants to expose their goods within reach of customers, affix the price, and take no further trouble about watching or selling them. When any one wants the goods, he helps himself, and leaves the money in its place.* What is even more singular is, that they claim to be, and seem really to be, of an Arabian stock originally, and have in their possession beads and other ornaments, not unlike those now found only among the tombs of Egyptians. Mr. Bowen, who is a man of considerable research, is to publish his discoveries on these and other points.

"They have but little mechanical art, but they understand working in copper and fine brass, and they make the best kind of morocco leather. The country is elevated, healthy, cool, free from the low country fevers. Europeans can easily live there. The natives have fine profiles, and are

quite different from the natives of the coast. They are anxious for missionaries and teachers to go among them. The King of Yoruba has been most hospitable, and urgent for Mr. Bowen to come and live in his country, and has freely given donations of land and houses to encourage this. Other princes vie with these offers, so that missions in that country will be at once self-supporting. This is one of the finest openings for science, and commerce with the interior, yet developed."

EXPEDITION TO AFRICA.—An expedition, under the charge of Dr. W. B. Baikie, surgeon R. N., has just been sanctioned by the Treasury, and will be composed (so states the United Service Gazette) of the following naval officers in addition: Lieutenant John H. Glover, Mr. Daniel J. May, 2d master, and Mr. Francis W. Davis, assistant surgeon. Dr. Baikie proceeds to Sierra Leone by the next African Mail, where he will remain until the arrival of a steamer to assist him in his operations. The object of the expedition is to penetrate into the interior of Africa for commercial purposes.

We have received the Annual Report of the Commissioner of Public Schools of Rhode Island—Robert Allyn, Commissioner. Also, that of W. H. Wells, Superintendent of the Public Schools of Chicago. The Canada Educational Directory and Calendar for 1857-8, edited by Thos. Hodgins. Report of the Central Committee of the Albany Congregational Convention. The Address at the Punchard Free School, Andover, Mass. Report of the School Committee of West Roxbury, Mass. The Wabash Magazine, a very neat work, published by the students of Wabash College. For these favors, as well as for various works which we can not now call attention to, we are very much obliged. The near approach of the close of our schools, and the annual examinations, and reports to be prepared, leave us but little leisure time. In our next we will endeavor to give these things more attention. For the same reason Mr. C. W., of Hagerstown, will excuse the promised Wayne County list till next time.

THE MAILS.—Complaints from different persons reach us in regard to irregularity in receiving the *Journal*. We will do all we can to correct this, but we wish our readers to understand that *we* do not mail the *Journal*. This belongs to the printers. The Executive Committee made a contract with them to print and mail the *Journal*. The Resident Editor keeps the subscription books, and on each mailing day deposits them with the printers; so that when he has duly recorded the names, his personal responsibility ceases. If, at any time, subscribers fail of receiving their *Journal*, we hope to be informed, and will have it re-sent. Our printers assure us that they exercise the greatest care. Of course the failures lie between them and the mails.

G. S. Howard, of Newburg, Ind., has removed to Middle Fork, Macon county, Mo., to take charge of the Mathematical Department of McGee College.

Our January number is all gone, and in order to supply the demand we have re-printed it, and send it with the April number to such subscribers as have not received it. We have only re-printed the reading matter, and have not bound it. In this form it will be just as well for those who wish to bind it, and with those who do not, it will make little difference. We can now supply the *Journal* from the beginning of this year. Send in your subscriptions.

The *Indiana School Journal* and the *Ladies' Christian Annual* for \$1.50 a year. The *Annual* is a dollar magazine, having a steel plate and 32 pages monthly. The June number will have a splendid steel engraving of the North Western Christian University, near Indianapolis. To any of our present readers at 75 cents a year Geo. B. Stone, Indianapolis.

Marion and Wayne counties were each pledged, at the Annual meeting, for 100 subscribers. For the benefit of our Wayne county friends, we would say that the pledge of Marion county is more than redeemed, while Wayne county stands at 92, omitting those who were obtained by our State agent. Try again. Marion was ahead last year. She will be so this year.

Mr. Joseph Pool, who pledged us twenty subscribers from Morgan co., has more than fulfilled his pledge. Much obliged.

We regret to learn that Mr. D. H. Roberts has been obliged, on account of ill health, to resign his situation at Farmers' Institute, Lafayette. Messrs. Kilborn and Rogers are his successors. Mr. Roberts is one of the most active and enthusiastic teachers in the State, and we hope that he will be enabled to resume teaching in the Fall.

The article in the April No., on the "Influence of Teaching upon the Teacher," should have been credited to Miss M. F. Wells, of New Albany.

W. H. G., of Zanesville: Yours is received.

J. A. Gilkey, recently of the "Montgomery Journal," has resumed his former profession, and is now engaged in teaching in Younsville.

O. A. Brownson, of Lamasco City, Ind., has removed to Sweet Springs, Virginia.

Messrs. Kilborn & Rogers have taken charge of Farmers' Institute, Lafayette.

The schools in Richmond, Madison, and New Albany are suspended for want of funds. This is a most unfortunate policy. In each of these cities a corps of excellent teachers had been collected, many of whom will now leave and make engagements elsewhere. Good teachers can not be secured unless their situations are permanent.

We take great pleasure in calling the attention of all interested, to the advertisement of Messrs. Armstrong & Greek, of Evansville. They have

established themselves in the manufacture of School Furniture in its various branches. Their styles and workmanship are fully equal to those of Boston, which have so long maintained the supremacy in this department. There is no longer excuse for the rude and uncomfortable furniture, which has so long encumbered our school-houses; and it is earnestly hoped that those having charge of the matter, will avail themselves immediately of the facilities now tendered them by Messrs. Armstrong & Greek. We can assure them, that the quality and even the *prices* are such as to remove all objection.

E. P. C.

BOOK NOTICES.

On p. 224, Vol. I, of the *Journal*, the Resident Editor called attention to *Soden's German Grammar*, but for want of time to examine it he expressed no opinion in reference to it. On p. 188, of Vol. I, we used the following language in connection with a notice of *Peissner's German Grammar*: "We are satisfied that a good German Grammar is a *desideratum*. We have tested in the class-room both Adler's Ollendorff, and Woodbury, and have come to the conclusion that a grammar which will combine the merits of both of these, will be the one deserving the most patronage."

The work of Mr. Soden seems to approach nearer to this "*desideratum*" than any we have yet seen. The first eight pages are occupied in a discussion of German pronunciation and syllabification, which are followed by six pages of reading exercises. The next twenty pages are filled with dialogues and phrases after the style of those in the *Phrase-Books* of Ehrenfried and Græter. Then follow eighty pages of exercises after the style of *Fasquelle's French Grammar* for the translation of German into English and English into German. About fifty pages are then taken up by tales, fables, songs, anecdotes, &c., of a character similar to those in *Adler's German Reader*. Then about half this number of pages contain pieces extracted from our school readers, which are to be translated into German. This part is followed by an appendix of eight pages, which contains samples of business and friendly letters, letter phrases, idiomatic phrases, and abbreviations. The remainder of the work, about one hundred pages, is occupied with grammar.

We are of the opinion that the work would suit American teachers better, if it contained a complete vocabulary of all the German words used in it. If this would swell the book to too large a size (it now contains 319 pages), the vocabulary might be made by merely putting after the

word, the number of the page or pages on which it is defined. We hope all those who are engaged in teaching the German language, will examine this work. It is published by *Applegate & Co*, Cincinnati.

W. D. H.

Our table is piled with works which we have time to notice but briefly.

From A. S. Barnes & Co., New York, we have "School Amusements," by N. W. Taylor Root.

This is a most valuable Teacher's assistant, and in it will be found many excellent suggestions in regard to amusements as auxiliary to school government. It has three distinct topics: "Every teacher his own drill master," "Gymnastics," and "School Amusement." As a specimen of the manner in which the latter subject is treated, we have extracted an article on "Whispering." There are a hundred things in the book which are valuable to teachers in the every-day work of the school-room.

From the same publishers we have received also another and standard work for the Teacher's library: "The Means and Ends of Universal Education," by Ira Mayhew. This work is so well known under the title of "Popular Education," issued by Harper & Brothers first, it needs no comment. Mayhew on "Popular Education" is known to every teacher. Barnes & Co. are also preparing a Series of Readers, of which the "Word-Builder" is the first. We have examined the Second Reader, and it compares favorably with the same grade of the best Series which are published.

Iverson & Phinney, New York. We have received through the courtesy of their agent, J. N. Terwilliger, a set of Sanders's Readers, which have been adopted very extensively in several States, in some indeed, almost exclusively. There are of course various opinions in regard to the merits of the various "Readers," which have been issued within the last few years. Sanders's has enjoyed a popularity second perhaps to none.

"The Humorous Speaker," by the same publishing house, is full of fun.

"Humor and fun,
Humor and fun,
There's nothing like it under the sun."


From Appleton & Co., we have "Arnold's Cornelius Nepos," one of the very best text-books to place in the hands of a young class in Latin, which we have ever used. Those who teach superficially, will find this a very unsuitable work.

Among our advertisements will be found that of J. H. Colton & Co., publishers of a Series of Geographies. Those designed for primary and intermediate schools, we have carefully examined, and they will in all respects compare favorably with those of Cornell, Mitchell, and Monteith. The larger work is not yet out, but will be soon. When this last work and the new one of Cowperthwait & Co., are out, we shall have as great a variety in Geographies as we have in Readers, Grammars, and Arithmetics. No poor text-book now has a shadow of a chance. Colton's, with its beautiful illustrations, its clear and accurate maps, in both of which respects it is excelled by none, will doubtless secure its full share of patronage.

THE
Indiana School Journal.

VOL. II. INDIANAPOLIS, JUNE, 1857. NO. 6.

NECESSITY OF COUNTY TEACHERS' ASSOCIATIONS.

 BY E. W. KINNAN.

The national airs of both ancient and modern times, seem to be the only departments of the musical world in which our patriots and national men love to roam. Bonaparte's Retreat, Yankee Doodle, and such airs as their childish ear first listened to, when the *drum* and *fife* were a show of curiosity to their juvenile minds, are still the only strains of music that fall in rapture on their dormant spirits. The mind, the *unsullied mind*, takes wings and is soon borne back to the days of its primeval existence. So it may be said of the term *Education*. Since Adam first set his foot upon God's domain, Education has been a subject for man's contemplation. And what Yankee Doodle is to the old veterans of the Revolution, so is the term Education to the sage whose life has been spent in the confines of the school-room. Both tune and term are of antique origin, yet the revolutions in which each played a conspicuous part, makes them dear to our sires. The child's first essay must be on the "all important subject of education." The young man, if he wishes to be successful in his first effort before the public, his subject must be that of education. The pedagogue, from the compeers of Ichabod Crane, to the distinguished scholar, Edward Everett, if he lifts his pen or parts his lips, the world stands aghast for something on education. The philosopher, when summoned to die, gives to the world as his last bequeathment a treatise on education, or some of its direct tributaries. But notwithstanding this perpetual sermonizing of a question coeval with the existence of man, it has been reserved for the

educators of the present century to add to this old song new features and different parts, until, like the Calliope, it is propelled by steam, playing the same tune, yet producing new music. True, the Calliope plays Yankee Doodle, and for aught I know, the "songs of David;" yet it has taken the musical world by storm. But, notwithstanding education is the progenitor of this favorite air, standing dressed in such a garb of attraction, with such beauty and symmetry, that the world is again lost in wonder, we find school teachers in the back woods of this unadulterated State of Democracy, that do not know the business of a 'Teachers' Association. Hand them the *School Journal*, asking for subscription, and they will tell you with great pomposity, that it's a medium by which some autocrats are to bring their names before the public, in order that they may enjoy the pleasant reflections of popularity.

"*Fogyism*" is the most formidable of all our foes; he attacks us upon our right and upon our left, in our front and in our rear. He stands ready and at all times, to retard our motion. If we have a new feature to offer, for either government or recitation, he immediately shoots forth his forked tongue; with threatenings he stops the car of progress, and with his vile mouth and the ignorance of his mind he uses the little triumphs of the past to establish his thread-bare theory. As "like begets like," so is he sure of being victorious with his friends, and thus from the very presence of truth, established by experience, he bears the trophies from the field, proud of an ill-gotten victory, and rejoicing that we "*fanatics*"—as they are pleased to term us—are again subdued. To overcome this will require great patience, great labor, and unflinching perseverance. "Death is a powerful instrument in reformation," says Mrs. Stowe, and so by this means our enemies are growing weaker, while their decrease in strength is our increase in power. Old landmarks are falling into oblivion, and as their possessors die, so are their principles buried. We are now in the path that will lead us ultimately to success. True, we are few in number but mighty in strength. The grain of wheat says, I can do nothing, but when associated with its kindred, it forms one of the principal exports of our country, and feeds the starving millions that live in the old world of darkness. Drops of rain might soliloquize in the same manner; yet by their union and material help, a world is rendered fertile, commerce has a healthy tone, and all things animate are crowned with prosperity. Well may we say with the poet:

"Drop follows drop, and swells
 With rain the sweeping river;
Word follows word and tells
 A truth that lives forever.
Flake follows flake like sprites,
 Whose wings the winds dis sever;
Thought follows thought, and lights
 The realms of mind forever.
The drop, the flake, the beam,
 Teach us a lesson ever;
The word, the thought, the dream,
 Impress the soul forever."

We ask but this unity throughout the State, of Teachers and Associations, to enable us in a short time to send up a healthy shout of intelligence as the result of that great Union which we now form a part of. Tippecanoe county will reap a reward from this in two years, that will be lasting as time. Its influence will be brought to bear in all parts of the country. From the highest grade to the hovel of the tyro, there will be a marked improvement, and if we only succeed in burying old "fogyism," and get the inscription of "no resurrection" on his tombstone, we shall have done in two years, what has taken some counties five and ten years. (But in the border counties of "Egypt," we shall not figure on such speedy revolutions.) We think this a means of bringing the teachers of the different parts of the country together, that they may consult with and learn from each other.

And certainly everything that has the least tendency to concert of action and harmony of practical teaching, should be employed. We want more interest felt, more energy exhibited, and greater zeal manifested for the cause, if we expect to be successful in this great work, we have undertaken. Comparatively speaking, Martin Luther Christianized the world, and dispelled the darkest cloud that ever hung upon the moral sky of the universe of God. He entertained no other idea than that of success and victory complete. Upon one occasion, when summoned to the city of Worms for examination, he was importuned by his friends not to go; that his enemies had planned to take his life in a tortuous manner. Luther replied, "he would go, though devils stood as thick on the way as the tiles on the people's houses." *He went and was triumphant.* Then let us say we will press onward until our most sanguine expectations are met, though "Old Fogies" stand as thick as the stars that deck the concave above us. The import-

ance of Associations must be axiomatic to all: the juvenile can comprehend their intention without demonstration. If their importance is fully understood, the necessity of their existence needs no argument to offer for their organized life.

Association is the basis of society. Its tone, character, and refinement depend upon association. Sir Walter Scott says, "the race of mankind would perish did we cease to help each other. From the moment that the mother binds the child's head till the moment that some kind assistant wipes the death damp from the brow of the dying, we can not exist without mutual help. All, therefore, that need aid have a right to ask it of their fellows, and no one who has it in his power to grant it can refuse without incurring guilt." The great mass of the people are enlightened and interested upon most subjects. But the profession of teaching they deem of no consequence. Some of them seem to think we were born "School Masters," and therefore not susceptible of improvement. Something must be done to break this spell of apathy. Their spirits must be aroused, and their hearts made to feel that we are deficient; that our schools are in great want; and that their children are suffering for the want of their assistance. Could we but have a campaign on education equal to the political one just passed, what think you would be the standard of our State? The money expended would build a comfortable house in every district in the State, and keep a school for five years at \$40 per month. If this was ours, the dark thralldom would soon vanish, and we should rejoice that we were redeemed from the mazes that apparently had buried us beneath the shadow of ignorance. But this can not be, and in its absence the substitutes that will best meet the wants of the people we must adopt, and these should be found in part in our organization, which should continue for years to come. By this method, we as teachers should learn first, and from us the people should learn where we teach.

When the people are awakened, the Legislature will be petitioned for their enactments favoring popular education, and thus the bud will germinate until our system reaches that degree of perfection that now causes other States to boast of their common schools and institutions of love, that makes them glitter as stars of the first magnitude.

Suppose that we have an Association in each of the 91 counties in our State, averaging twenty teachers; we would have an army of 1820 in number. What an influence they might wield, and what

labor could they perform if the courage and determination of a Bonaparte was only lodged in their bosoms. But it seems that only a few counties in this State are having these meetings, but even that few, we are glad to know, appreciate and feel what we most need. Every high and worthy motive seems to urge us forward. As teachers we ought to devise means for the improvement of our schools. As friends of humanity we ought to leave no means untried that bid fair to confer a favor, great and lasting, upon whole generations of men. These are elements that we claim from County Associations. They will certainly elevate the standard of moral excellence, help to qualify the teacher for his avocation, and this knowledge will soon be imparted to the youth of our land. We are pleased, says Mr. Childs, to behold now and then teachers awakening to the responsibility and honor of their profession; and we hope soon to see the day when the masses shall also become more interested in the cause, and when from every town, village, and hamlet of our Union, shall go up an earnest acknowledgment that to education we owe our individual happiness and our national prosperity. And we hope soon to see the day when legislators, instead of spending their time in paltry political intrigues or bacchanalian reveries, will be up and doing to further this noble undertaking. The fires of progress must be fanned into a brightly glowing, resistless flame. Each spark must be as the star that never sets, always bright and attractive. Teachers, is not this emphatically our mission? Surely every heart that is enlisted in this cause will respond aye. The great heart of the enlightened part of our Hoosier State will say aye; and we shall find favor and friends sufficient for our wants, if we will but ask in honorable terms. Soon then may we expect to see the good results of this and similar organizations. And the general intelligence and superior knowledge that forms the vast difference between this and some of our sister States, "will be ours to possess, ours to enjoy, ours to transmit."

INTEGRITY THE BASIS OF GOOD CHARACTER.—Integrity is the foundation of all that is high in character among mankind; other qualities may add to its splendor, but if this essential requisite be wanting, all their lustre fades.

SCHOOL SONG.—GROWTH.

TUNE—" *Few Days.*"

The oak that lifts its perfect form,
 Growing, growing,—
 That braves the wind and dares the storm,
 Grew *day by day*.
 A tender sapling once it stood,
 Growing, growing;
 An acorn, once, within the wood,
 Humbly it lay.
 At evening and at morning,
 Growing, growing,
 All night, till dewy morning,
 Upward its way.
 For its motto's ever "onward!"
 Growing, growing!
 For its motto's ever "onward!"
 Upward its way.

The stream that seeks the ocean-tide,
 Growing, growing,
 Came stealing down the mountain side,
 Gentle and meek.
 But every night and every day,
 Growing, growing,
 A hundred rills came, blithe and gay,
 Its tide to seek.
 The river, rushing downward,
 Growing, growing,
 Sings ever, flowing onward,
 Thus doth it say:—
 "Oh! my motto's ever 'onward!'
 Growing, growing;
 Oh! my motto's ever 'onward!'
 All through my way."

Beneath the sea a coral grove,
 Growing, growing,
 Lifts up, at last, the wave above,
 Joyful its head.
 Long years have gone, since, striving first,
 Growing, growing,
 The coral said, "I yet will burst
 Out from my bed.

I'll go, the sunlight seeking,
Growing, growing;
The waves shall hear me speaking;
Thus will I say,—
That my motto's ever 'onward!'
Growing, growing;
That my motto's ever 'onward!'
Upward my way."

The coral grove, the stream, the tree,
Growing, growing,
A lesson teach,—Oh! may not we
Heed all they say?
The tree upon the hillside green,
Growing, growing,
The coral and the stream serene,
Sing on their way,—
"Be thou, like us, forever
Growing, growing;
Pause thou not, falter never!
Onward! go on!
Be thy motto ever 'onward!'
Growing, growing;
Be thy motto ever 'onward!'
Upward and on!

M. B. C. SLADE.

THE SEVEN WONDERS OF THE WORLD.

1st. The Colossus at Rhodes. It stood on the two moles which formed the entrance of the harbor, at the city of Rhodes.

It was composed of brass, and some estimate of the amount used may be made from the fact that after it had lain in ruins 894 years, there remained after the diminution from rust and theft, 20,000 pounds. It was sold to a Jew of Edessa and carried away on 900 camels. It was hollow, and the cavities filled with stones, to counter-balance its weight and render it firm on its pedestal. Its height was 105 feet, and all vessels could pass between its legs. There were few persons who could encompass its numb with their arms, and its fingers were larger than most statues. It was the workmanship of Chares, who was employed 21

years in building it. It was erected B. C. 300, and, after having stood 56 years, was broken off below the knees, and thrown down by an earthquake.

2d. The Temple of Diana at Ephesus. This surpassed all the structures of antiquity, and the building of it occupied 220 years. It was 425 feet in length, 220 in breadth; adorned with 127 columns of the Ionic order, and Parian marble, each sixty feet high; and a statue of the goddess, supposed to have been sent down from heaven. On the very night of the birth of Alexander the Great, it was partially burnt down by Herastratus, who took that means to immortalize his name. Dinocrates was the architect who superintended its rebuilding. Alexander offered to appropriate his spoils to its restoration, if the Ephesians would give him the sole honor and have his name placed on the temple. They refused, *really* from national pride, but with the pretense. "That it was not right for one divinity to erect a temple to another."

3d. The Labyrinth of Egypt. It is in Lower Egypt, near Lake Mœris. According to Herodotus, it consisted of 3000 chambers; 1500 above ground, and the same number subterranean. It had but one entrance and so many intricate windings, that when once in, it was impossible to get out without a guide. It is said to have been built by 12 kings. All the opinions, with reference to its object, appear to yield in acumen and ingenuity to that of Gatterer, who supposes it to be an architectural symbolic representation of the zodiac, and the course of the sun through the same; one-half being above, and the other below the earth, whilst the 3000 chambers have a symbolical reference to the precession of the equinoxes.

4th. The Pyramids of Egypt. Of these there are nearly 100, and they constitute the most stupendous works of man. The largest is at Ghizeh, near the Nile, which covers 11 acres of ground, and is about 500 feet high, and is said to have employed 100,000 men thirty years in building.

5th. The temple of Jupiter Olympus. It was situated on the river Alpheus, in Elis, near the spot where the Olympic games were celebrated. Its height was sixty-eight feet; breadth ninety-five, and length two hundred and thirty. It was adorned internally and externally with a great variety of statues. The figure of the Olympian deity was composed of ivory and gold, and of such vast proportions that though seated it reached nearly to the ceiling, suggesting the idea, that in rising it would bear away

the roof. In the right hand, it grasped an image of victory, and in his left a scepter, curiously wrought of various metals, on which was perched an eagle.

6th. The walls and hanging gardens of Babylon. These were built by Semiramis, were 350 feet high, 87 feet thick, and about sixty miles in circuit. They were composed of brick baked in the sun, and cemented with bitumen instead of mortar. The gardens were situated in an immense palace built at the west end of the bridge which crossed the Euphrates.

It contained a square of 400 feet on every side, and was carried up in the manner of terraces, one after another, till it reached the height of the walls of the city. The ascent was from terrace to terrace by means of stairs ten feet wide. The whole pile was sustained by vast arches, raised on other arches. On the top of the arches flat stones were first laid, then a great quantity of reeds and bitumen, next a double row of bricks, the whole covered with thick sheets of lead. This floorage was designed to keep the moisture of the mould from escaping through the arches. The earth laid thereon was so deep, that large trees could take root, and with such the garden was covered, together with plants and shrubs of every description. On the upper terrace, there was a pump and engine, for drawing water from the river to water the garden. Amytis, the wife of Nebuchadnezzar, desired something resembling the hills of her native Media; and to gratify her, the king raised this prodigious structure.

7th. The Mausoleum. A monumental structure reared by Artemisia, in memory of her husband and brother, Mausolus, king of Carir, B. C. 352. She is said to have been so much attached to him that she mixed his ashes with water and drank them off. The entire height of the monument was 140 feet, being nearly square, each side measuring 113 feet, and each end 93 feet. It was decorated with a peristyle of 36 columns, about 60 feet in height. There are no remains of the monument at the present time.

[Selected.]

WEEDS.

A bright drop glistened in Frederick's eyes, but it could not stay there; it rolled down his cheek, followed by another and another—a real shower. "See here," said a merry voice beside him,

"who thought of its raining to-day when the sun is pouring down at this rate, and not a cloud to be seen, save this one up here?" and the sister's hand put aside the sunny hair, and brushed the would-be wrinkles from his brow. "Come now, what is all this for? Tell me, won't you?"

Fred. could never refuse when that voice bade him speak, so he drove back the remaining tears, made his voice as clear and manly as possible, and replied: "O, nothing, only I'm discouraged,—that's all." "That's considerable, I should think," replied she, "but go on. What are you so discouraged about?" "Oh, these weeds! Here I worked hard all day Friday, and left the bed completed ready for the plants and seeds. Saturday it rained so hard I could do nothing, and yesterday was Sunday. Well, when I came this morning what do you suppose I found?" "Don't know. Had the chickens been scratching it up? They were looking for worms after the rain." "No, no, they had not been here. Worse than that. All over the bed were little weeds, just above the ground to be sure, but there they were, and you know while they were there nothing else could do any good. I had pulled every weed I could find before the rain, and now I have been at work all the morning, but it is all to no purpose. There are hundreds of little leaves just starting, and that is not the worst. I was looking to see where so many of them came from, and there, all mixed through the fine earth, were thousands of little seeds, so fine I can never get them out. There they must be; and they will spring up and grow faster than any I can plant. Weeds always grow faster than any thing else. So you see I can just do nothing," and the tears came again. Agnes's bright eyes grew brighter, and her sunny little face looked prettier, for she had thought of a remedy. "Cheer up, Fred.," said she, "there is no need of any more rain at present; I know what you can do." "I can do nothing," he replied in the same desponding tone, "but wait till all these seeds have sprung up, and then pull them as I did the others. After they are all grown it may do some good to plant something else." "Yes, and while you are waiting for them to grow, some gentle breeze will waft you as many more of the same sort; so the summer will pass away, your flower bed all the time presenting the same beautiful appearance as now. No, that will never do." "What then? What can I do?" "Fill the ground so full of other things there will be no room for the weeds. Pay

no attention to the little troublers, but crowd them out with tulips, and pinks, and verbenas. Fill the ground full of the plants you like best, and never fear the weeds."

May, with her laughing sunshine and showers, her bright green fields and opening foliage, smiled and gave her place to June, the month of roses; but not a nook in all the garden greeted the morning sun with a sweeter perfume, or a fairer array of beauty, than the flower bed of little Fred.

Weary hearted, is here no word for thee? Weary of still finding evil without and evil within. Linger not to pull every weed that springs in the garden of the mind, and then weep and mourn over the seeds the hand can not reach. Nor think to wait till they have all been rooted out, and then fill the mind with good; lest life's seed-time pass away and no glory-wreaths adorn the brow of manhood, and when age shall come the almond shall blossom alone. Occupy the mind with the thought of the true, the noble, the excellent; cherish a love of all that is pure and beautiful and lovely, and fear not the upspringings of evil. The atmosphere will be too pure for them. Feeble plants of the shade, kept close to the ground; they will soon moulder back into earth, and themselves yield freshness and vigor to the growth of the good and beautiful.

J.

CHICAGO SCHOOLS.

From the report of Mr. H. Wells, Superintendent of Schools, we learn the following facts in regard to the schools of the Lake City.

The High School edifice was completed in 1856. Its value, including furniture, is \$50,000. The plans for it were furnished by J. C. Dore, former Superintendent, and the Illinois State Agricultural Society awarded him a diploma and premium for the "best design for High School building." Two first class Grammar and Primary School Houses, with accommodations for 600 pupils each, were also completed in the fall of 1856. These are divided into rooms for 60 scholars each.

The attendance in the schools during the year, was as follows :

Whole number of different scholars, - - - - -	8,542
Average number enrolled, - - - - -	3,688
Average daily attendance, - - - - -	2,606
Per cent. of daily attendance on the whole number enrolled, - - - - -	31
Per cent. of daily attendance on the average number enrolled, - - - - -	71

In addition to the regular schools, there has also been an evening school for adults, with an attendance of 150. There are also three Industrial Schools, of which the Superintendent says, "Of all the special agencies that are in operation to reduce the number of ignorant and vagrant children among us, the industrial schools are by far the most efficient and successful."

The Reform School, five miles from the city, is also an important feature in the educational system of Chicago.

"While we have over three thousand children who never attend the public or private schools of the city, and while ignorance and crime continue to associate together, we shall have no lack of candidates for the Reform School. Mr. Nichols, the Superintendent, has adopted a system of discipline, which is worthy of observation and study by all who are interested in the management of children."

SCHOOL FUND.—Fortunately for Chicago, the school section was situated near the centre of the city. Of the one hundred and forty-two blocks of the section, all but four were sold some time since for \$33,000. Some idea of the vast increase in value of real estate, may be seen from the fact that the four remaining blocks are now valued at \$860,000.

The whole amount of the school fund of the city is \$1,112,000, larger than that of any other city except St. Louis, and, as Mr. Wells says, equaled by only twelve out of the thirty-one States.

The expenses are given as follows:

Salaries of Teachers, - - - - -	\$23,365
Incidentals, - - - - -	6,355
Rent of Houses, - - - - -	11,200
<hr/>	
Whole amount, - - - - -	\$40,920
Number of Teachers, - - - - -	61
Average expense of each scholar, - - - - -	\$4.79


The following table, as given in Mr. Wells's report, will be interesting:

	<i>Cost of Instruction.</i>	<i>No. of Scholars.</i>	<i>Cost per Scholar.</i>
New York,.....	\$753,853	138,570	\$5.44
Cincinnati,.....	149,713	16,673	8.98
Philadelphia,.....	502,102	54,813	9 16
Boston,.....	341,874	23,778	14 37
Chicago,.....	40,920	8,542	4.79

STORY OF SCHOOL.

The red light shone through the open door,
 From the round declining sun;
 And fantastic shadows, all about,
 On the dusty floor were thrown,
 As the factory clock told the hour of five,
 And the school was almost done.

The mingled hum of the busy town
 Rose faint from the lower plain,
 And we saw the steeple over the trees,
 With its motionless, golden vane,
 And heard the cattle's musical low,
 And the rustle of standing grain.

In the open casement a lingering bee
 Murmured a drowsy tune, 
 And from the upland meadows, a song,
 In the lulls of the afternoon,
 Had come on the air that wandered by,
 Laden with scents of June.

Our tasks were finished and lessons said,
 As we sat all hushed and still,
 Listening to the purl of the brook,
 And the whirl of the distant mill,
 And waiting the word of dismissal, that yet
 Waited the master's will.

The master was old, and his form was bent,
 And scattered and white his hair;
 But his form was young, and there ever dwelt
 A calm and kindly air,
 Like a halo over a pictured saint,
 On his face marked deep with care.

His eyes were closed, and his wrinkled hands
 Were folded over his vest,

As wearily back in his old arm chair,
 He reclined as if to rest.
 As the golden streaming sunlight fell
 On his brow, and down his breast.

We waited in reverent silence long,
 And silence the master kept,
 Though still the accustomed saintly smile
 Over his features crept;
 And we thought, worn with the lengthened toil
 Of the summer's day, he slept.

So we quietly rose and left our seats,
 And outward into the sun,
 From the gathering shade of the dusty room,
 Stole silently one by one—
 For we knew by the distant striking clock,
 It was time the school was done.

And left the master sleeping alone,
 Alone in his high backed chair,
 With his eyelids closed, and his withered palms
 Folded as if in prayer,
 And the mingled light and smile on his face;
 And we knew not death was there.

Nor knew that just as the clock struck five,
 His kindly soul away,
 A shadowy messenger silently bore
 From its trembling house of clay,
 To be a child with the Saints of Heaven,
 And to dwell with Christ away!—[*Selected.*]

UTILITY OF CLASSICAL STUDIES.—EXTRACT FROM
 AN ADDRESS BY REV. SAMUEL FULLER, D. D.

The scholar, enriched, disciplined, and transfused by classic lore, can alone say, "I speak that which I know;" and because he can, his words, forged and tempered upon the only anvil where the best instruments of our discourse can be struck, old Vulcan's fire-block, are like barbed and winged arrows, shot from a bow of steel; they reach the mark, pierce the breast, and transfix the heart.

The utility of classical studies is not merely the demonstration of philological research : it is like the teaching of experience.

Of the three clergymen of the church of England, who excited the great religious movement which characterized the middle of the eighteenth century, George Whitefield was a more eloquent orator than either John or Charles Wesley. But Whitefield, notwithstanding his moving and surpassing eloquence, was comparatively illiterate ; his early life among taverns and stables and theatres, being no substitute for the Grammar School and the University, of no either of which knew he anything from personal experience.

On the contrary, the Wesleys were thoroughly trained collegians ; their love of ancient learning being exceeded in their love for Christ, and for the souls of the ignorant and perishing.

A century has passed away, since the voices of these preachers stirred the heart of a slumbering nation, as the thunderbolt stirs the sluggish atmosphere ; and what is the position of each at the present time ?

Who now reads Whitefield's Discourses ? Or, if any person chance to peruse these unskillful productions, he wonders that such unhammered wedges could ever have pierced and wounded sinful hearts.

In striking contrast with their more eloquent compeer, the Wesleys are in their refined and widely diffused writings living an immortal life among their admiring followers ; controlling and directing at this fleeting hour a larger number of minds than at any former period.

The same demonstration respecting the usefulness of classical knowledge is forced upon us when we discriminate the heroes of the Revolution.

In forensic and parliamentary eloquence, Patrick Henry was without a rival. But as for teachers he had none, save his grasping intellect, his fiery imagination, his indomitable will, and the stormy times in which his lot was cast.

Unlike this self-made orator, Alexander Hamilton was the favored youth upon whom classical instructors expended their assiduous care, imparting to their apt and graceful pupil a burning and glowing pen, as well as a persuasive and commanding tongue.

As a consequence, how widely contrasted is the destiny of these favorite sons of our Republic ! The backwoodsman of Virginia is remembered only in a few fragmentary remains preserved by

the recollection of others ; while the pride, as well as the grief, of the Empire State, is immortalized in his profound, scholarly, and inimitable expositions of our National Constitution.

We reach the same demonstration in favor of the study of ancient learning, when we compare Benjamin Franklin and Thomas Jefferson. The untaught printer of Boston and Philadelphia does indeed amuse and instruct us in his pointed apothegms of Poor Richard ; and his brief and dry speeches in the Continental Congress were like battering-rams either to demolish the arguments of his opponents, or to urge onward the laggard car of business ; but when the voice of an outraged and determined nation was to utter its thunders, defying tyranny and demanding the audience of the world, his unclassic mouth faltered, and declined the mighty effort ; and the immortality which radiates with increasing splendors from our Declaration of Independence, rests upon the head of the classical Sage of Monticello.

TEACHING TO WRITE THE ENGLISH LANGUAGE.

Still another branch of our language is sadly,—almost totally—neglected : the learning to write good and grammatical sentences. Composition writing is often practiced, but most commonly is so practiced as to lead the pupil to hate the very thought of writing. It should, however, be taught as a necessary part of daily duty, not by requiring long themes on “ Education,” “ Virtue,” “ Temperance,” “ Spring !” “ War,” and the like ; but by drawing out from the scholars short and easy, well constructed and intelligent sentences, on such objects and topics as they are daily seeing or thinking upon ; sometimes inducing them to write their various requests in the form of notes, and again encouraging them to write letters of business or forms of notes and answers to questions. In this way they will be made to love writing, or putting their thoughts on paper, just as they love talking ; and the careful writing of a few sentences in this way every day, will do a great deal to insure order and method in thinking, accuracy in spelling, correctness in syntax, and carefulness in the use of words,—more, in fact, than can be accomplished in any other way.

A remark which ought to be made somewhere, may as well be made here, in reference to the effect of this practice of frequent

writing on the habits of the pupils in all their future business life. Nothing is better calculated to enable men to spell all the common words in current use in business correspondence, than the frequent writing of letters of the sort above spoken of. Scholars may learn to spell almost infallibly every word "put out," or dictated, or pronounced to them by the teacher, and yet they will make most ludicrous blunders when they are compelled to write those same words, while they are thinking of them. Were it proper, we might give illustrations on this point, which would make every reader smile audibly. There would be no necessity to go beyond the archives of the office in which this Report is written. The letters of trustees of school districts, and other school officers,—not always excepting the letters of School Committees themselves—would supply what would be amply and more than sufficient to point the moral we wish to enforce. If teachers required their pupils to write something every day, and, after it had been corrected carefully, to copy it neatly, they would not write letters to ask advice about "*the propper moode of kollecing dea-strickt tackes*;" neither would they write to "*purtishion a cord into law for the readdress of surtin greevinsez*;" nor would they speak of "*the morrill karickter of a skoull teecheur*;" and sundry other things never before "attempted in poetry or in prose." If this method of simple business composition were constant practice, from the time the scholars begin to write, till they leave the school for business, they would not begin a letter thus: "*estgreen-Wich——i Take my pen In hand*;" for they would learn the use of Capital letters and the proper mode of commencing, writing, punctuating, and ending a letter, as well as how it should be folded and superscribed. And besides, they would learn exactly what they are to practice almost every day in their after lives.

Now, it is with these things just as it is with everything else. Men do not learn much simply by thinking over the theory. They must put their theories, whatever they are, into practice; and not once alone, nor yet twenty times, but a hundred, and sometimes more, before they can be called expert and ready in the use of those theories, and especially in the application of them. It is still more strikingly true that children do not—and from the very nature of their minds they can not—learn by being told *how* to do a thing. *They must do it.* By beginning early in life and going over and over again with the duty they are daily to perform, and by this process alone, can they be made to be rapid, accurate—in-

fallible almost—writers and transactors of business, public and private. This topic, however, is so well treated in the Report by the Principal of the Normal School, that I forbear to dwell longer upon it. And the remedy is so plain that it seems hardly to merit the space already devoted to it. It was deemed best and even necessary to say so much, because, from its very simplicity, it seems likeliest to be neglected; because facts do show the evil to be so great; and also because there is so great a temptation, both to scholars and teachers, to overlook it in a laudable desire to learn so much of the higher branches, and of what is called practical. But we hold that nothing is so practical, and so necessary to be done correctly and elegantly, as that which we are required to do every day in our lives.—*Twelfth Annual Report of the Commissioner of Public Schools, R. I.*

EXERCISE FOR GIRLS.

Did any of my readers ever meet a girl's school taking their accustomed exercises? Is there not something excessively ludicrous in the idea of some thirty or forty girls walking primly and demurely to a certain point, then right about face and back again! The timid step; the regular methodic movement, which I have heard waggishly compared to the mode of progress of an ordinary sixteen-legged caterpillar; the sedate tone of voice, each one talking with becoming decorum with the one with whom she walks abreast, perhaps catechising one another on the meaning of the eccentricities of some French verb, or ascertaining the degree of proficiency each has attained in "Magnall's Questions." How can this minister to health! But the medical attendant of the school recommends exercise; and is not walking across the common and back exercise! Of course it is! What more would you have? Why, if that very worthy lady, the school-mistress, would allow me to have the charge of her pupils on the next afternoon's walk, (I believe it is no ambition to take a walk every day in the week,) I think I could put them in the way of getting exercise by which they would be much more benefited, much more pleased, and come home with rosy cheeks and more eager appetites than is now the case. Probably at the schools where those girls are there are several teachers and perhaps some of the teachers may

have some little knowledge of botany; so I would suggest that the teacher should ask two or three of the girls to bring her some wild flowers from their next afternoon's walk, with the promise held out that she would afterwards tell them something about them; and I must further petition that the girls be no longer compelled to walk two by two, methodically, but be allowed to roam and ramble at large—of course, taking care they do not get out of sight of their teachers. I admit that the effect of all the girls trudging along a country lane—some looking into the hedge bottom on this side, and others straggling to the other side of a broad green lane—would not have nearly the same fine effect which is produced by the formal procession along the dusty pathway on the common; but I think it would impress any one who saw them with the idea that the girls were at ease, and were out for enjoyment: whereas the stiff and prim set-out which we are accustomed to see, rather gives one the idea that they had said their lessons sadly, and are doing penance for it, exposed to the public gaze.—*Ladies' Christian Annual.*

We invite the careful attention of our young readers to the following article on "Great-Young-Men;" and trust that their perusal of it may have its legitimate influence upon them in these days of rampant "Young Americanism." We are glad of any opportunity to direct this headlong spirit into channels where both the possessors of it, and the community at large, may be benefited.

E. P. C.

GREAT YOUNG MEN.

Don John of Austria won, at twenty-five, the greatest battle of modern times; had it not been for the jealousy of Philip, the next year he would have been Emperor of Mauritania. Gaston de Foix was only twenty-two when he stood a victor on the plains of Ravenna. Every one remembers Conde and Rockroy at the same age. Gustavus Adolphus died at thirty-eight. Look at his captains; that wonderful Duke of Weimar, only thirty-six when he died. Banier himself, after all his miracles, died at forty-five. Cortez was a little more than thirty when he gazed upon the golden cupola of Mexico. When Maurice, of Saxony, died at thirty-two, all Europe acknowledged the loss of one of the greatest captains and profoundest statesmen of the age. Then there is Nel-

son and Clive—but these are warriors, and perhaps you may think there are greater things than war. I worship the Lord of Hosts. But take the most illustrious achievements of civil prudence. Innocent III, the greatest of Popes, was the despot of Christendom at thirty-seven.

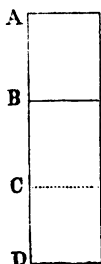
John de Medici was a cardinal at fifteen, and, Gaiciardina tells us, baffled with his state-craft, Frederick of Arragon, himself. He was Pope, as Leo X, at thirty-seven. Luther robbed even him of his richest province at thirty-five. Take Ignatius Loyola, and John Wesley; they worked with young brains. Ignatius, only thirty when he made his pilgrimage, and wrote the "Spiritual Exercises." Pascal, the greatest of Frenchmen, wrote a great work at sixteen, and died at thirty-seven, which reminds me of Byron, greater even as a man than a writer.

Was it experience that guided the pencil of Raphael, when he painted the palaces of Rome? He died, too, at thirty-seven. Richelieu was secretary of state at the age of thirty-one. Well, then, there are Bolingbroke and Pitt, both ministers before other men leave off the cricket. Grotius was in great practice at seventeen—an attorney-general at twenty-four. And Acduiviva—Acduiviva was general of the Jesuits—ruled every cabinet in Europe and colonized America, before he was thirty-seven. But it is needless to multiply instances. The history of heroes is the history of youth.

MATHEMATICAL DEPARTMENT.

W. D. HENKLE, Editor.

SOLUTION OF No. 35.—BY THE EDITOR.



$AB=12$, $BD=18$, and $AD=30$. Let $x=BC$, the distance the water has been lowered at the expiration of any time t , and R =the rate per hour the water lowers at B, or the distance the water would lower in an hour if the rate at B were continued during an hour; also let r =the rate at C. Now these rates must be inversely as the distances of B and C from A, whence

$$R : r :: 12 + x : 12, \text{ or } r = \frac{12R}{x + 12}$$

But the rate at the expiration of any time t is $\frac{dx}{dt}$, therefore,

$$\frac{12R}{x+12} = \frac{dx}{dt} \text{ or } 12Rdt = xdx + 12dx. \text{ Integrating we get}$$

$12Rt = \frac{1}{2}x^2 + 12x$, C being nothing, because when $t=0$, $x=0$. Now when $t=1$ hour $x=4$ feet, whence this equation becomes $12R=56$ or $R=4\frac{2}{3}$.

Substituting this value of $12R$ in the same general equation, we have $56t = \frac{1}{2}x^2 + 12x$.

This equation is true for any value of x , therefore when $x=18$ it becomes $56t=378$, or $4t=27$, or $t=6\frac{3}{4}$, the time required.

SOLUTION OF No. 35.—BY H. N. ROBINSON.

Conceive the water in the well to be divided into an indefinite number of very thin layers, the depth of each being dx . Designate the number of square feet on the surface of the well by m . Then (mdx) is the differential of the quantity of water in the well. To lift the integral of this quantity one foot, we will suppose, requires *unity of force*. To lift it x feet is then the differential of the force,

$$\text{whence } d.F = mxdx.$$

By integration $t = \frac{1}{2}mx^2 + C$.

But to obtain the whole amount of force, we must take the integral between $x=12$ and $x=30$.

$$\text{That is from } \frac{1}{2} m (30)^2 + C$$

$$\text{Take } \frac{1}{2} m (12)^2 + C$$

Wherefore $= \frac{1}{2} m (30^2 - 12^2)$, and that is all that can be done without the given condition.

The force to take out the first four feet is expressed by $\frac{1}{2} m (16^2 - 12^2)$, and this force requires one hour's work. Let t be the time required to empty the well. Then by the proportion

$$i : t :: 16^2 - 12^2 : 30^2 - 12^2$$

$$28.4 : 42.18$$

$$28 : 21.9$$

$$t = \frac{27}{4} = 6\frac{3}{4} \text{ hours.}$$

SOLUTION OF No. 35.—BY SAMUEL ALSOP.

Let x be the depth to the top of the water at any time, and a the constant effort, we have

$$adt = xdx \text{ whence } at = \frac{x^2 - 144}{2}$$

$$\text{If } t=1, x=16, \text{ whence } a=\frac{256-144}{2}=56$$

$$\text{If } x=3 \quad 56t=\frac{900-144}{2}=\frac{756}{2}=378$$

whence $t=6\frac{3}{4}$, the time required.

[This problem was also solved by Calculus, by its originator, *Jacob Staff*.]

SOLUTION OF No. 36.—BY MILTON BOND.

A in traveling $22\frac{1}{2}$ days would travel 405 miles. Were B like A to turn back and travel over the same distance which A does, he would be $22\frac{1}{2}+9+9=40\frac{1}{2}$ in traveling 405 miles=10 miles per day.

[This problem was solved by *Chas. H. S. Royce, O. A. Brownson, J. Pool, I. F. Reece, Geo. D. Hunt, W. P. T. B., Judge Clark, and Samuel Alsop*.]

PROBLEM No. 41.—BY THE EDITOR.

Find two *different* quantities such that each shall be equal to the square of the other.

PROBLEM No. 42.—BY THE EDITOR.

Divide a board 10 feet long and 2 feet wide into four pieces, that they can be put together so as to form a square.

PROBLEM No. 43.—BY SAMUEL ALSOP.

Three men, equal in strength, undertake to pull down the steeple of an ancient church. They fasten three ropes to a ring near the top, and, standing at equal distances from the circular base of the steeple, they pull at equal angles of 30° to each other. The ropes severally make an angle of 40° with the perpendicular axis of the steeple. Now, if a single force of 500 lbs. were applied at right angles at the same point, it would be just sufficient to overturn the steeple. Required the force actually exerted by each man?

[This problem is from *Olmsted's Philosophy*, p. 60. The answer there given is 284,717 lbs. That the accuracy of this answer may be proved or disproved, is the reason the problem has been proposed.—ED.]

DEATH OF E. M. STRIBBLING.—It is with deep sorrow that we announce the death of our former contributor, *E. M. Stribbling*. We learn from the *Springfield Republic*, which some mutual friend has been so kind as to send us, that he died in or near Mt. Vernon, O., on Saturday, April 18th. He was an Engineer on the Springfield, Mt. Vernon, and Pittsburgh Railroad. We became acquainted with him about six years ago, when engaged in that portion of the road between Springfield and Delaware. He had then but just begun to re-read geometry, having paid no attention to it since his school days in Virginia, about fifteen years before, and even then only learning it as school boys generally do. He went to work to solve the unsolved exercises in *Robinson's Geometry*, some of which we have known him to study over from morning until evening, scarcely moving from his table. Such perseverance as he possessed we have never seen in any other mathematical student. The result of this diligence was, that in about one year he became the most skillful geometrician we had ever known, and many were the pleasant hours we spent together in the pursuit of mathematical knowledge. He became also an excellent algebraist, and for the last two or three years, as time would permit, he had been engaged in the study of Calculus, which he would no doubt have soon become skillful in, had his life been spared. My young mathematical friends, let us learn a lesson in the success of Mr. Stribbling in the pursuit of knowledge. It is but just to say that he was not a *mere* mathematician, but that he had enjoyed the humanizing effects of the study of languages in early life.

Mr. Stribbling leaves an amiable and interesting wife and one or two children to mourn his sudden and unexpected departure, for he died away from home, after a brief but painful illness. His family has our most heartfelt sympathy, for we feel as if we *too* had lost a near relative. *Requiescat in pace.* W. D. H.

ORIGIN OF THE PENDULUM.—Galileo, when under twenty years of age, was standing one day in the metropolitan church of Pisa, when he observed a lamp, which was suspended from the ceiling, and which had been disturbed by accident, swing backwards and forwards. This was a thing so common, that thousands, no doubt, had observed it before; but Galileo, struck with the regularity with which it moved backwards and forwards, reflected upon and perfected the method now in use of measuring time by means of a pendulum.

EDITORIAL MISCELLANY.

NATIONAL TEACHERS' ASSOCIATION.

To the Teachers of the United States :

The eminent success which has attended the establishment and operations of the several State Teachers' Associations in this country, is the source of mutual congratulation among all friends of Popular Education. To the direct agency and the diffused influence of these associations, more, perhaps, than to any other cause, are due the manifest improvement of schools in all their relations, the rapid intellectual and social elevation of teachers as a class, and the vast development of public interest in all that concerns the education of the young.

That the State Associations have already accomplished great good, and that they are destined to exert a still broader and more beneficial influence, no wise observer will deny.

Believing that what has been done for States by State Associations may be done for the whole country by a National Association, we, the undersigned, invite our fellow teachers throughout the United States to assemble in Philadelphia, on the 26th day of August next, for the purpose of organizing a NATIONAL TEACHERS' ASSOCIATION.

We cordially extend this invitation to all *practical teachers* in the North, the South, the East, and the West, who are willing to unite in a general effort to promote the educational welfare of our country, by concentrating the wisdom and power of numerous minds, and by distilling among all the accumulated experiences of all, who are ready to devote their energies and contribute their means to advance the dignity, respectability, and usefulness of their calling; and who, in fine, believe that the time has come when the teachers of the nation should gather into one great National Brotherhood.

As the permanent success of any association depends very much upon the auspices attending its establishment, and the character of the organic laws it adopts, it is hoped that all parts of the Union will be largely represented at the inauguration of the proposed enterprise.

May 15, 1857.

T. W. VALENTINE,	Pres. New York State Teachers' Association		
D. B. HAGAR,	" Massachusetts	"	"
W. T. LUCKY,	" Missouri	"	"
J. TENNEY,	" New Hampshire	"	"
J. G. MAY,	" Indiana	"	"
W. ROBERTS,	" Pennsylvania	"	"
C. PEASE,	" Vermont	"	"
D. F. WELLS,	" Iowa	"	"
A. C. SPICER,	" Wisconsin	"	"
S. WRIGHT,	" Illinois	"	"

N. B.—All teachers to whom this circular may be sent, are requested to consider themselves as specially invited to join in this enterprise, and to be present at the proposed meeting. Editors of educational journals, and of newspapers generally, are requested to give this call a notice.

NOTES BY THE WAY.

The teacher, from the nature of his profession, has but little opportunity to see the actual state of educational matters in his State; and as the enterprise in which we are engaged is carried on mainly by teachers, we deem it but just that they should know, as far as possible, the real condition of things in various parts of the State. To state the *whole truth*, may often be unpleasant to us, and mortifying to people of particular localities, yet the sooner the whole scene is before us, the better we shall know what work there is to be accomplished, and how to bring it about.

In Johnson county, we found no Teachers' Association. In Franklin, the county seat, there had been no free school for two years, but a building had been commenced for school purposes, which may in process of time be completed. All admitted, "we are far behind here." Franklin College is sending out some teachers, yet there is no special effort made to prepare teachers professionally.

President Bailey and Prof. Hougham are good school men, and rendered us essential aid in our mission, and extended to us their kindly hospitalities. There are fifty-nine school districts in this county, but only twenty-one have had schools in them during the past year. There are 4,796 youth numbered, and only 941 have attended public schools.

There are good "school men" here, and we believe they will combine their influence, and make that influence manifest.

Boone county has its light and dark shades, in varied proportions. "Coon skins are no longer legal tender for taxes." School-houses are beginning to appear. Number of youth, 5,815 : 1,380 of these have attended public school the past year; \$1,895 have been expended for building school-houses the past year; \$4,671 assessed for this year. A Teachers' Association had been formed, and several meetings held. An Institute will be held in this county in August. We found some ardent friends of free school improvement, and foremost among them, Mr. Olive, with whom we visited schools.

There are 93 school districts in this county: 49 have had schools in them during the past year.

By the efforts of a few noble men, Thorntown has a first rate academic school, taught by Messrs. Sims and Tarr. These gentlemen are devoted, efficient teachers, and will let their light shine. "The Friends" have also a good school near this place. The public schools, in and about this place are sadly neglected; any other interest seems of higher importance to the people, than affording a good education to their children. In several schools that we visited in this county, the scene was ludicrous. The floors

were entirely covered with mud, the benches and desks of the poorest kind, and in one, a teacher was, in addition to his other duties, squirting tobacco juice copiously, at about four squirts per minute. He did not take the *School Journal*. "He had no need of it."

In Hendricks county some fine progress has been made in the right direction. \$15,119 have been expended for school-houses during the past year. In Centre Township nine houses have been built, 25x32 feet, all painted, at a cost of \$800 each. Messrs. A. Bland and W. Bishop are Trustees in this Township. In Liberty Township every district is supplied with a fine school-house, 26x36 feet, well situated. In Liberty, a small village of 400 inhabitants, they have the finest house that I have yet seen. It is 60x36 feet, two stories high, with one acre of land well fenced for play ground.

Milton Lindley, Dr. Moore, and a first class pioneer teacher, J. H. Davis, and others are the moving spirits in school matters, and well have they done up the work. At Danville, the people seem interested in having the best class of schools. For two evenings the Methodist Church was filled by those who were interested in "free schools and educational progress." Messrs. Parker and Cox, teachers here, are live men, and are not afraid to roll up their sleeves and do hard work. There will be a Teachers' Institute in this county in August. In most parts of this county none but first class teachers will be employed, and those at good salaries.

Every one knows where Putnam county is, and most know all about it. It is third in population, and about eighth in wealth. But it is to be regretted that the people have not yet learned that *educated mind* is the best capital a State can have. Only two townships have built any school-houses during the past year. \$1,630 have been expended for that purpose in the county. There are 7,499 youth: of these, only 2,100 have attended public school the past year, while about one in nine of the adult white population can neither read nor write. By many, the school system that we have, is regarded as an oppressive affair, robbing people of their money, and *obliging* them to have schools for their children. Their Legislators, we are informed, "were down on all free schools," last winter. A little of the right kind of education would not damage such men.

There are brighter days ahead for Putnam county. A few teachers, and others, noble and true, are at work. Although the number is small, and the progress will be slow, darkness will fade before the light. The school cause has a noble champion in the editor of the "*Banner*," who will not "hold his peace" until the cause of education is triumphant. We met over forty teachers and friends in an educational meeting, who resolved to hold an Institute next October, in Greencastle.

One boy in this county, when urged to attend school, refused, saying, "it was of no use;" his *father* could not read nor write, and had always enjoyed good health, and had made money. Why should *he* trouble himself to attend school?"

Greencastle has no free school buildings worth the name, nor free schools that in any degree answer the end in view. There are signs of progress in this matter here. J. H.

FAILURES TO GET THE JOURNAL.

We have received complaints from Evansville and Richmond of the failure of the *School Journal* to reach those places. In two instances the packages containing the names of about half the Evansville subscribers, have been re-sent to us, once from Lawrenceburg and once from Aurora. Whether the fault is in the mailing clerk, or the Post-Office, we can not say. Letters from Richmond also say that only one package reached Richmond last month. The other has, perhaps, been mis-sent. We have sent the Evansville packages again, and if any one of our subscribers in either Richmond or Evansville, will notify us of missing numbers, we will immediately re-mail them. So also to subscribers in other places.

Those whose files for the present year are broken, must notify us immediately, for our back numbers are nearly gone.

NUMBER OF SUBSCRIBERS TO THE SCHOOL JOURNAL IN WAYNE COUNTY, IND.

Richmond,	-	-	-	-	62	Dublin,	-	-	-	-	3
New Garden,	-	-	-	-	13	Greensfork,	-	-	-	-	2
Hagerstown,	-	-	-	-	7	Abington,	-	-	-	-	1
Cambridge,	-	-	-	-	7	Boston,	-	-	-	-	1
Centerville,	-	-	-	-	6	Chester,	-	-	-	-	1
Milton,	-	-	-	-	4	East Germantown,	-	-	-	-	1
Webster,	-	-	-	-	3	Jacksonburg,	-	-	-	-	1
Williamsburg,	-	-	-	-	3	Whitewater,	-	-	-	-	1
Total,	-	-	-	-	-	-	-	-	-	-	116
Marion County,	-	-	-	-	-	-	-	-	-	-	112

Wayne County is now ahead. We have received several lists from there during the past ten days. As soon as we have a little leisure, we will make that affair straight. Marion is bound to be ahead at the end of the year.

MICROSCOPIC EXAMINATION OF THE BLOOD.

It will be recollected that in the investigations of the murder of Dr. Burdell before Coroner Connery, some important conclusions were arrived at from the microscopic examination of the stains of blood. Similar testimony was resorted to in a recent trial for murder in the State of Maine. The question there was whether certain stains upon a knife were those of sheep's blood or human blood. The *Portland Advertiser* publishes the testimony given by the medical witnesses:

"The blood of man does not differ much from the blood of other animals in its chemical properties and constituents. But when subjected to the microscope it at once reveals important physical differences. To understand this, it should be premised that blood is not, as it appears when first drawn, wholly fluid, but consists of two or three distinct bodies, of which one class is known as globules. Instead of being round, as one would suppose, these bodies in the higher animals have the form of discs, circular, thick at the edge and thin in the middle, like two watch crystals placed back to back. The shape of the globules is retained after the blood has coagulated, and their size is capable of measurement by microscopic apparatus.

"It is the size of these masses which is said to afford the test between human and other animal blood—they being in the blood of some animals larger, and in others smaller, than in the blood of man. Dr. Hubbard stated that the elephant ranks just above man, and the monkey just below, as regards this point of size. In the same species of animals the globules vary in dimensions within a small range of some 2 or 3 per cent.—and the same variation is observable in a person in health and sickness.

"But in comparing human blood with sheep's blood—which was particularly within the scope of Dr. Hayes's testimony—it would seem that the difference of size is such as to allow no ground for confusion, it having been recorded in the tables of several microscopic observers. To show the extreme nicety of these observations, we quote from Dr. Hayes: 'If you divide an inch into 10,000 parts, the length of one of these measurements will be covered by 3,200 or 3,400 of the blood discs of human blood. Using the same measure, the average number of 5,300 of the discs of sheep blood will be required to fill the same length of the scale. This measurement, made in different countries, by different observers, corresponds closely.'"—*N. J. Messenger*.

GLASS AND ITS PHENOMENA.

The elasticity of glass exceeds that of almost all other bodies. If two glass balls are made to strike each other at given force, the recoil, by virtue of their elasticity, will be nearly equal to their original impetus. Connected with its brittleness are some very singular facts. Take a hollow sphere, with a hole, and stop the hole with the finger so as to prevent the external and internal air from communicating, and the sphere will fly to pieces by the mere heat of the hand. Vessels made of glass that have been suddenly cooled, possess the curious property of being able to resist hard blows given to them from without, but will be instantly shattered by a small particle of flint dropped into their cavities. This property seems to depend upon the comparative thickness of the bottom: the thicker the bottom is, the more certainty of breakage by this experiment. Some of these vessels, it is stated, have resisted the stroke of a mallet given with

sufficient force to drive a nail into wood; and heavy bodies, such as musket balls, pieces of iron, bits of wood, jasper, stone, &c., have been cast into them from a height of two or three feet without any effect, yet a fragment of flint not larger than a pea dropped from three inches height, has made them fly.

TOBACCO CHEWING AMONG THE CLERGY.—At the opening of the session of the New School General Assembly, now sitting at Cleveland, Ohio, a communication was read from the trustees of the church and some of the citizens, requesting the members of the assembly to abstain from the use of tobacco during the sessions, so that the pews might not be defiled! The trustees had previously removed all the carpets in the house. But this was not all. The communication further stated that some of the families by whom the members would be entertained, had been made very sensitive on the same point by their experience in former years, and many had refused to receive members, for fear that they would prove to be tobacco chewers! The West would be a good field of labor for Rev. Mr. Trask, the anti-tobacco lecturer. We should judge by the above, that his services might prove of great benefit there.—*Boston Journal*.

HEBREW A LIVING LANGUAGE.—A political newspaper, written and printed in the Hebrew language, may be classed among the "curiosities of literature." Such a paper is now appearing at Johanisberg, in the Baltic provinces of Prussia. It is edited by Rabbi S. Silbermann, of Syck, under the title *Ha Magid*, i. e., "The Informer," and is published weekly at a very low price. Hebrew printing offices existed in Russia and Poland before this, but were closed by Czar Nicholas, as promoting, by the introduction of a Hebrew literature, the national isolation of the Jews, and thus hindering their Russification. This measure has been abolished by the present Emperor, and *Ha Magid* is therefore imported from Prussia without any difficulty, and finds a large circulation among the Russian and Polish Hebrews.

ITEMS.

A volcano has lately made its appearance in Pigeon Mountain, about ten miles from Augusta, in Georgia. On the 24th of April the mountain was terribly agitated, and the citizens in the vicinity terribly frightened by the commotion. No one has ventured near enough to ascertain anything of the depth of the crater. About ten miles south of Pigeon Mountain is the crater of an extinct volcano, which gives evidence of having been in active eruption within less than five hundred years.

The value of the property belonging to Columbia College, N. Y., is estimated to be worth \$2,000,000. Prof. Anderson, of the Board of Trustees, has recommended an extension of the collegiate course to six years, and as an inducement for students to pursue a more thorough course, the

establishment of a system of rewards proportioned to their acquirements. Among these rewards is contemplated a list of fellowships with a salary of \$500 *per annum*, for those who shall complete the full curriculum of studies, and shall meritoriously receive the highest honors of the College. At a meeting of the Trustees on the 18th of May, Charles Davis Joy, of Union College, and Francis Lieber, of South Carolina, were respectively appointed to the professorships of Mathematics, Chemistry, and Political Economy. Prof. Lieber was the editor of the *Encyclopedia Americana*, a work which should be in every teacher's library.

The building of the University of Northern Pennsylvania was burned down on the night of the 18th of April. The building was owned by Prof. J. F. Stoddard, he having bought it last fall at sheriff's sale.

Mr. E. P. Cole, formerly of Evansville, and late Agent of the State Teachers' Association, has taken charge of the Monroe Female Seminary at Bloomington, Ind.

Geo. A. Chase, another of our associate editors, and at present Principal of the flourishing Female Institute at Greencastle, is also about to change his location, he having accepted the Presidency of Brookville College, Brookville, Ind.

Geo. M. Dewey, of Buchanan, Michigan, has been appointed Assistant Superintendent of Schools in Michigan.

An Institute will be held in August in Wayne county.

INDIANA STATE TEACHERS' ASSOCIATION will meet in the city of Richmond, on the 25th, 26th, and 27th days of August next. This meeting of the Association will be one of the most important of any ever held in the State, and the Executive Committee deem it best to have the session continue three days. The citizens of Richmond will entertain all the delegates gratuitously.

The Executive Committee will be ready to make a full report of its proceedings since the first of January, and will present important considerations pertaining to educational interests in our State, for the action of the Association. President J. G. May will deliver his opening address on Tuesday, 10 o'clock, A. M.

A report will be made by E. P. Cole, "On educational condition and prospects in Indiana."

By G. A. Chase, on "Obstacles to the progress of Education in Indiana."

By Miss Belinda Yocum, on "The importance of Teachers knowing more than they are required to teach."

By Mrs. Kate Henkle, on "Drawing and Painting as a branch of education in our schools."

By M. Hollingsworth, on "Improvements in instruction and government in Schools."

E. E. Edwards will read a Poem.

Rev. Dr. Edwards, President of Hanover College, will deliver an address on Wednesday eve.

Every subject reported upon will be discussed at length.

The following subjects will be presented for extended discussion:

1. The subject of Normal Schools, as recommended by Prof. Mills in his last annual report.

2. The obligation of the State to make provisions for the education of all her children, and to have means to keep the free schools open eight months in the year.

3. Improvements requisite in the examination of teachers, and in the standard of qualifications.

4. The policy of adopting, in the government of schools, the "Self-Reporting system."

Teachers in their several counties are requested to have the above notice of the meeting of the Association, published in the local papers of their counties during the month of July, and to call the attention of teachers and friends of education to the same. Let there be a little effort made by live teachers to get a large meeting. The good work of school reform has been nobly commenced: it remains to be seen whether it will be carried on to final success.

JOSIAH HURTY, *Ch'n Ex. Com.*

M. CHARLES, *Sec'y.*

BOOK NOTICES.

TEACHER'S GUIDE TO ILLUSTRATION, by F. C. Brownell. Price, in cloth, 50 cents; paper, 38 cents. Copies sent by mail, pre-paid, at these prices. Address Holbrook School Apparatus Co., Hartford, Conn., or E. E. Talcott, Chicago, Ill.

The Ohio Journal of Education says of it: "Here is another of the 'books that are books.' We wish *all* teachers would procure and examine it. Its suggestions are of great value. All teachers, of whatever grade their schools may be, will find this a most useful and instructive manual."

ANOTHER NEW READER—Edited by Noble Butler, A. M. Published by Morton & Griswold, Louisville, Ky.

This is one of a series of six. The book before us contains a great variety of pieces of the familiar style which are so interesting and valuable in teaching children to read. We have examined it hastily, but some of the characteristics of a good reading book are so prominent as to strike us even in a hasty examination.

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Jan. 15, 1857.

F. C. BROWNELL, Hartford, Conn.

THE
Indiana School Journal.

VOL. II.

INDIANAPOLIS, JULY, 1857.

NO. 7.

PORK AND POTATOES: THEIR INFLUENCE ON THE
BODIES AND MINDS OF OUR PEOPLE. WISDOM OF
THE MOSAIC LAW.

"Scrofula," from Scrofa—a hog: see Dictionaries.

The miserable and degrading mental feebleness with which the great mass of the people continue to ignore most subjects that affect their bodily health, until their ignorance overwhelms them with some great calamity, is certainly ill calculated to give the health-teacher any high opinion of their intellect, or of the prospective value of his own labors to the public good. Our Lager Beer and Tobacco articles have raised such a storm amongst the elegant and intellectual votaries of those delicious luxuries, as to show pretty clearly the tenacity with which his admirers will probably cling to the interesting quadruped of whose virtues we are now about to discourse. Indeed, the amiable creature fairly reciprocates the compliment of their devotion to lager beer, by partaking of one portion of their favorite beverage, (it is true under the domestic inconvenience of somewhat contracted accommodations and a limited and compulsory bill of fare,) but with gratifying gusto and a still increasing fatness, so much appreciated by his biped admirer. There is an evident unkindness, however, yet we can not but think it creditable to the æthetics of the quadruped, that he carries the compliment no further than the acceptance of a portion only of the lager beer, as a diet drink, and refuses the tobacco in toto; a better physiologist than his master, he declines the intoxicating portion of the beverage, and can find none of his bodily wants supplied by—smoke; the refuse of the still and the

brewery, the poor fellow is constrained to take from necessity ; but it passes the art of the great tyrant to make him chew or smoke ; in that he surely shows the superiority of instinct over education ; nor do we think we slander the gentlemen who improve their classic outlines and dignify their steps with lager, when we compliment the quadruped for the superiority of his taste ; it evidently serves him far better than that which can not recognize the strong and acrid taste of the tobacco necessary to bring the precious beverage up to the gradually fuddling point, without which the consumer would lose his relish for it. We defy any man whose palate is sufficiently undefiled to relish a piece of wholesome bread or good beef, not to taste the acrid tobacco in many samples of the beverage ; with a glass of Croton in hand ready to rinse the mouth, we have repeatedly detected it, and men of sound observation who have abandoned the pernicious drink, have often assured us that the effect of such drugged specimens is exactly analogous on the brain, to the first effect of tobacco before the system has become accustomed to it ; put as much tobacco into his allowance of swill as would strengthen the lager beer up to the fuddling point, and you will soon observe the superiority of instinct over education ; our life for it, the quadruped would give you an expressive glance of reproach, and refuse the proffered boon at once.

It seems, however, that this sagacity is not proof against the infernal machinations of his Western keepers ; or what is more likely, that the tyranny of man has constrained the hog to eat what his instincts would teach him to refuse. We learn from our exchanges that great numbers of hogs have died in the neighborhood of Cincinnati, and indeed all over the West, from an epidemic disease analogous to cholera. Such has been the awful havoc among them, that we wrote to the editor of the *Erie City Dispatch* for reliable information, well knowing that we should get it from so fearless and independent a quarter. Before we received his answer, which we give below, we learned that the Legislature of Ohio had passed a law rendering it penal to put strychnine amongst the grain from which they distil whiskey ! (it having been found that a vast increase of strength and intoxicating power may be given to liquor made by that process ;) the poor hogs were dying in vast multitudes from eating the swill, whilst the human consumer remained entirely unsuspecting of his danger ! Oh ! ho ! thought we, gentlemen of the Lager Beer trade in Cincinnati,

amiable philosophers and good Christians, are you still preparing to drown our poor body in that barrel of lager, or to hoist it on that horrid pole? You have, it seems, a far more powerful enemy near home; the legislative scalpel is too sharp for ye: ye will have to look out for some new dodge. Our friend of the *Dispatch* answered our inquiry by a letter detailing the losses at the various pens, to the number of tens of thousands, worth, when fat, six hundred thousand dollars! He says: "We publish a short account of the Hog-Cholera to-day, from the *Pittsburg Dispatch*, to which we ask the attention of the reader. We here wish to observe that but few people know, when they are eating pork, particularly that which has been fattened at large or in distilleries, the amount of disease and nastiness which they are taking into their systems. You know you are eating *hog*, but you do not know how much scrofula, erysipelas, and, in many instances, the very elements of worse disease. Whole families sometimes live almost entirely on *hog*, and if the children are troubled with watery sores around the mouth, swelling and inflammation in the glands of the throat, the poor things have fever blisters, and have taken cold, which *settled in the neck!* or if they die with the croup, *Providence did it!* If any body has ever killed a *hog*, and found an abscess of matter in the neck or near the kidneys, or with all the internal organs studded with tubercles, which we have often seen packed for Eastern use, they have only put out of the world a miserable mass of scrofula; they did not kill anything to eat—nor would they, had the hog been healthy; and those who pride themselves on killing and eating *fat hogs*, must not be surprised if they swell up and burst. A *fat hog* is the very quintessence of scrofula and carbonic acid gas; and he who eats it, must not expect thereby to build up a sound physical organism. While it contributes heat, there is not a twentieth part of it nitrogen, the base of muscle."

This is sound practical truth. Fat pork was never designed for human food; it is material for breath, and nothing more; see Liebig and other organic chemists and physiologists; it makes no red meat or muscle; the prize-fighter is not allowed to eat it; all that is not consumed by the lungs, remains to clog the body with fat. As long ago as our twelfth number, we explained all this in an article entitled, "Fat and its uses." We can not go over that ground again, but must be excused if we repeat in this place the sentiment advanced in that article, namely, that the man who is not acquainted with the elements of the body, and the actual value

of the various articles of food that sustain it, occupies a position about as dignified as he who does not know the laws of his country, or who resigns the care of his soul to a Roman priest. The popular idea of boils and other unsightly eruptions being produced by excess of grease in diet, is undoubtedly correct: notwithstanding the vital necessity of a good portion of wholesome beef and mutton fat and butter, in all persons who are of low degree of life-force or at all inclined to scrofula. We have most extensively treated that subject in many of our past numbers. Suffice it here to say, that fat is a vital necessity, and none can be healthy without it; but it requires a corresponding degree of exercise to throw it off by the lungs; its specific purpose in the economy is to supply material, that is, carbon, for breath, and to prevent the too rapid waste of the red meat or muscle of the body, which must and does take its place when the fat of the body is all consumed, and the individual eats none, or not enough to supply the waste by breathing.

We have said that fat never makes muscle, and we also aver that it does not give life-force or capacity to endure fevers, and especially cholera. The carnivorous animal gets large supplies of nitrogen which is the basis of the red meat that it eats; it has comparatively little fat, and it runs off that little very soon, and requires some fat in its food to produce more; this it gets from its prey; ready-made muscle is its food; the Arab of the desert and the American Indian are both lean from exercise; they rapidly consume their fat.

The hog, when fed with potatoes and kept quiet, makes little muscle, but much fat; the Irish women are inclined to indolence, and eat excessively of potatoes; they are usually fat; it is the experience of every practical physician that they die rapidly from fevers and cholera, whilst the miserably lathy American, stoutly resists both, and far oftener recovers; the puffness and watery-looking fatness of paupers and old prisoners who use a poor vegetable diet, and little or no exercise, is remarkable; the cholera and typhus fever scourge the prisons awfully. We have seen eleven deaths in one morning, in the year 'thirty-two, at Bellevue, of cholera. Luxurious people are never strong. Activity and flesh-eating give life-force. Indolence and vegetable-eating decrease it. Whatever the cause may be of the tremendous mortality amongst the hogs, now existing at the West, it is very evi-

dent it is a deficiency of organic or contractile power, for they die of diarrhœa, and the general resemblance of the symptoms has given the disease the appellation of Hog-Cholera.

The wisdom of the Jewish law which prohibits the use of pork, will soon be acknowledged by all rational beings. That swine are afflicted with scrofula and tubercles, we have repeatedly shown; and every killer of hogs knows it; the indigestibility of the flesh is acknowledged, and if people were enlightened, the hog would only be raised for his fat alone: this is available in all cases instead of the whale and other fish oils, and will doubtless be made so in place of vegetable oils: a few excepted of the finer kinds for eating. Mutton and beef, if our farmers ever become enlightened, may profitably take the place of the hog, and would add greatly to the health and dignity of the farmer's household. Hog husbandry is debasing. The influence of pork-eating on the farmer is degrading: neither he nor the slave would be able to accomplish his work by the use of it, that is, the fat part, without other food, as material for muscle. Good husbandry would furnish other fat for the farmer, to say nothing of butter, which the present catalogue of the grasses and cereals, and enlightened irrigation, would furnish in sufficient abundance.

And this brings us to speak of the influence of pork-eating on the moral condition of our people. If, and we emphatically aver it a correct criterion, the material and getting up of the family meal classifies the occupant of a household amongst rational and intellectual beings, then we say that those on whose tables pork is most frequently found, are the least intelligent and most groveling in their views. We know distinctly the full bearings of what we utter, and precisely how it will be received, nor do we care a farthing for the anathemas that will be hurled at us for the assertion. The potato has done more to demoralize and debase Ireland and keep the inhabitants under a vile and designing priesthood, than all the extravagance of monarchy and the harlotry of the English Church. Nor would the poor Irish wretches seek heaven in the whiskey-bottle and at the confessional, if their miserable bodies were not exhausted of organic force by an unnutritious root, which requires nothing but a pair of hands to claw it from the earth, a few bits of peat to cook it, and the hard earth of the cabin, foul and damp with human filth, and often shared as a lodging-room with the foul animal we speak of, as a family board. Dr. Pareira ranks it at only one-tenth the nourishment of meat! What me-

tive remains for his elevation, if a human being is taught to look no higher than such a repast for the nourishment of his body, and to the nearest priest for the welfare of his soul? Now compare this fairly with the slave and his hog and ash-cake, and the poor farmer, such as we have often seen him at the family meal—ay, as you may now find him all over our country, with his salt hog, potatoes, and sour rye bread, and his miserable husbandry, and thousand excuses for not raising sheep, protecting and feeding his cattle, and changing and cultivating his fowls and seeds, and attending carefully to a good vegetable garden. You need make but small search for his pig pen, his foul barn-yard, his whiskey-bottle and tobacco-box, or his nauseous pipe. He will largely defend his beloved porkers, his system (!) of husbandry and his favorite luxuries; the hog is his grand exemplar of manners and physiologics, his omnivorous animal laboratory that converts the produce of his farm into his great staple—pork. Poor Sir Walter Raleigh, we have often shed a tear for your sad fate; but our wicked fancy has often pictured ye making an offering to the devil of a hog stuffed with tobacco. The devils, we think, selected a very appropriate lodgment when they besought the Saviour to send them into the hogs; it is a great pity that the entire family of swine were not comprised by that same two thousand; we should have thanked Heaven for their devotion to hydropathy.—*The Scalpel*.

PHONETIC METHOD OF TEACHING CHILDREN TO READ.

Two or three months since, we referred, in a brief article, to the above subject, and said, at the close of the year when the experiment had been completed, we should call attention to it again. As the Phonetic method has been the theme for two reports before the State Teachers' Association, and has been repeatedly discussed in our own and in the Associations of other States, no apology is needed for alluding to it a second time. It is a question of fact, not of theory. Are children taught more quickly and are they better taught by taking the sounds first instead of the letters? So far as we have been able to judge from the trial here during the past year, we are perfectly satisfied that there is a gain in every respect by substituting the Phonetic for the Alphabetic method.

The transition from the former to the common print, which has always seemed to us as well as others, the most difficult matter, is in fact attended with no difficulty at all. No transition, reader, is necessary. The scholars will make the change themselves. But our experience shows us that it is best to keep children in the Phonetic print, until they can read it *well*, for then the transition is much more easy and rapid. As the result of the experiment, we copy the following article from the *Indianapolis Journal*, the editor of which was at some pains to observe the failure or success of the trial. We also subjoin that portion of our report to the School Trustees which relates to this subject :

THE ALPHABET AT A DISCOUNT.—Some twenty years ago an Englishman suggested the possibility of reconstructing our written language, so that the alphabet should be replaced by a system of signs representing sounds. The advantages he proposed to gain by the change were the securing a perfect uniformity of spelling, and conveying at once to the reader a perfect idea of the pronunciation of a word, without the necessity of turning to a dictionary, or asking some better informed friend. His suggestion has been elaborated into a system which has been quietly but effectually working its way into favor. "Phonetics," it is called. It is being taught in a good many schools, and has recently been introduced into the schools of this city. Willing to ascertain what, if any, value, the system possessed, our authorities employed Mrs. Longley, of Cincinnati, to take charge of a class in Phonetics, in one of our Ward schools, and for some six months she has been teaching, with what success we propose to say presently.

Any one who will analyze a word as he speaks it, will find, when he has reduced it into its elements, that the residuum is not composed of the letters of the alphabet, by a great deal. The sounds that form a word have but a very partial representation in the alphabet, nearly as slight and inefficient as the Free State representation in the Kansas Legislature. Some letters often have no sound at all, while others are compelled to do duty as representatives of a half dozen sounds. This radical injustice of course produces its natural fruit in perplexities and confusions in attempting to form words out of the alphabet. "A," in the alphabet is a very easily recognized individual, but when he is put in company with a couple of "l's" and spells "all," he isn't the same "a," in sound, by a great deal. A child naturally associates with the "letter" the sound suggested by its name. Consequently, when he has learned his letters he has not learned all that is necessary to enable him to read. Combining the sounds he has learned to attach to his alphabet, in reading, would make very queer gibberish indeed. He has another thing to learn, and that a very hard one. That is, after learning the *names* of letters in the alphabet he must learn their *force* or use in making words. This last is

the main thing, and the alphabet with its silent letters, and treble-sounding letters, hinders very nearly as much as it helps.

Here the system of "Phonetics" steps in. Instead of teaching a boy twenty-six letters, which he uses sometimes, and don't sometimes, and sometimes uses one for three or four purposes, it forms an alphabet of signs, composed of ordinary letters where they will serve, representing *all the sounds* used in speaking. When a boy has learned these, he can read. The sounds are, in his mind, associated with letters which always represent the same sound, and all he has to do when his "sounds" are learned, is to put them together. Reading, in "Phonetics," is simply pronouncing the letters. Reading, in the ordinary mode, is not pronouncing the letters, by something more than a "jug full." "Phonetics" performs easily and at once the troublesome transition from the alphabet to reading, which, in ordinary instruction, has to be crossed by a long and ugly bridge of "spelling." Any one, by thinking a moment, will see what an advantage a system of sounds, always uniform, and always giving with a word its exact pronunciation, has over the old system.

But here the trouble begins. All our books are in the ordinary type, with the ordinary spelling. A child thoroughly grounded in "Phonetics" may not be able to read a newspaper or a book any better than if it were printed in German. The system would be glorious, if every body understood it, and all printing were now done with "sound" letters. But as that is not the case, and children must meet the world as it is, the question is very natural, "What is the good of teaching Phonetics after all?" The Phonetic "Reformer" would say, of course, "If the system is good it ought to be prevalent, and if it is not, it is every body's duty to adopt it as soon as possible, and do all they can to extend it." That is a good argument to a man's conscience or his logical sense, if he has any, but it won't avail against the ugly fact that the kind of reading needed in the world is not the Phonetic kind. As the world stands, unreformed and alphabet bewitched, there is but one consideration that can make "Phonetics" acceptable to most people, and that is, its aid in learning children to read in the ordinary mode. Will a child learn quicker to read in ordinary type, by being taught first the analysis of sounds? We confess our opinion, in the absence of any facts, would have been that he would not. The transition from the Phonetic type, with its uniformity of sound, to the ordinary alphabet with its puzzling changes of sound, looks fully as hard as the transition from the alphabet to reading, of which we have spoken. But it is not so. A visit to Mrs. Longley's class will prove it. We heard her classes recite, and can attest one fact, that is worth a dozen reformatory appeals to common people, and that is, that children who began the alphabet with her last September, and have been taught only Phonetics, read better, with better emphasis, better pronunciation, *in the ordinary type*, than children who had been taught in the usual mode, and were already reading last Septem-

ber. The difference is palpable. It sounded odd, certainly, to hear them spelling with the grunts and hisses of the Phonetic system, (analyzing a word into its *sounds* instead of its letters,) but the result was there, plain and unmistakable. The Phonetic scholars, with half or less than half the schooling of the others, read better in ordinary type and spelling than the others. Now why this is, we don't know exactly, and can't explain to our own satisfaction by any means, though we have a dim idea of the reason. But it *is* so, as any body may find out by a visit to Mrs. Longley's school, in the Fifth Ward School-House. We are disposed to think the experiment quite successful, and to congratulate our school authorities on their wise disregard of idle prejudices, in thus giving the system a trial here.—*Indp'l's Journal*.

PRIMARY SCHOOLS.—Of these there are eight, two in the First Ward and one in each of the others. In this grade the children commence their school education, and before they are promoted, they are required to be able to read any thing in the Indiana First Reader, and in the first half of the Second Reader; also to spell any word in the tabular spelling exercises in these books, amounting to more than twelve hundred words. No other text-books are required, but the children have oral exercises in Geography and mental Arithmetic. Each scholar before leaving the Primary School must be able to add quickly any numbers which do not amount to more than *ten*, and as great a variety of combinations as possible is given by the teachers. This exercise is believed to be more valuable than any other kind of mathematical exercise which very young scholars can acquire. In Geography, the location of the school, of their homes, of the more prominent city buildings, their direction from the school-house, together with a knowledge of Colton's Picture Maps, is required. These maps are well adapted to giving the infant mind accurate ideas of the meaning of the more common geographical terms, and are in use in all our Primary and Secondary Schools. Every scholar in this grade is also required to have a slate and pencil, and spends much of his time in drawing, printing, and most are able before leaving to write their names. This standard for the Primary Schools we believe is suited to the age and capacity of the children attending them, and can be accomplished by bright, intelligent children, of five and six years of age, in from a year to a year and a half, if they attend regularly, and have skillful teachers. Of *those who commenced their letters* at the beginning of the past year, but two classes had reached the standard of promotion at the close, and in both these cases the children were older than the average of

those entering the Primary School. Our teachers say that it takes about as long for children to learn their letters and to be able to combine them in words of two letters, as it does to go through the remainder of the First Reader and learn all the spelling exercises. And this is not strange, for the abstract characters are meaningless to the child, and after they are learned, their names do not enter into the sounds of words. For example, a child learns A. But perhaps the first word which he reads will be *Ax*, in which the sound of the first letter is entirely different from what he has been taught to call it. So with all his reading. He never thinks of the sound of the letter which he has been accustomed to give when speaking its name. He has to learn the sounds afterwards. These difficulties in Primary teaching have induced me to test the advantages of the Phonetic method in learning to read. This proceeds upon the principal of teaching the sounds before the letters, and has this important advantage: that children having once learned the character representing a sound, can at once apply it in reading. The success of the experiment which has been tried in the Fifth Ward Primary School has been all that could have been expected. Classes have been formed at eight different times during the course of the year. The two first formed have made the transition from Phonetic to common print, and are now reading and spelling in the Indiana Second Reader. The first class made the transition three months since, and can now read well and spell accurately anything in the first 120 pages of the Reader above mentioned. This was fully tested in the recent examination, in which all the reading and spelling exercises were selected by the Trustees and visitors. There was great distinctness in articulation and enunciation, readiness in pronouncing words, good emphasis, and a varied intonation which surpassed anything we have heard in any Primary School. In spelling, although difficult exercises were selected, and in various parts of the book, not a single word was missed—equalling, in this respect, our very best schools taught by the Alphabetic method. I refer to the spelling particularly, because, as children in the Phonetic method are taught to spell by sound during the whole time they read the Phonetic print, it might be reasonably supposed that in this print they would be behind those who are taught in the usual way. The second class made the transition four weeks since, and now read tolerably well in the Second Reader. One little boy in this class his parents were un-

able to teach his letters after more than a year's trial. A year by the Phonetic method, and he is reading in the Second Reader. It will be seen from the facts here given, that the transition from one print to the other is attended with no difficulty. One of these classes began the common print eleven weeks ago, and the other only four weeks. No intermediate or transition Reader is needed. From the Phonetic first book scholars can pass directly into the Second Reader. Our own experience and that of others shows us that children will learn the letters of common print, without the aid of teachers, before they leave the Phonetic books. Yet notwithstanding the high degree of success which has attended this trial, the old established A B C method of our fathers should not be laid aside without still further evidence in favor of a new system. I desire to see the two compared more fully. Let a portion of our Primary Schools pursue the old plan, and the remainder try the Phonetic. We shall then see whether the latter will show equally good results, with teachers who have no special training or experience in that method. It is certain nothing can be lost by doing so, and no expense attends the one plan more than the other.—*Extract from School Report.*

EXTRACT FROM REPORT OF J. W. BULKLEY.

We are much indebted to J. W. BULKLEY for a copy of his Report of the Schools of Brooklyn, L. I. Mr. BULKLEY has for years ranked among the first educators in the country. His reports are always able and instructive. His ideas on "Examinations" will be interesting to our readers:-

The pupil must be taken from the accustomed track through which he has followed his teacher, thrown upon his own resources, required to analyze a given proposition, to elucidate his subject or make a practical application of the principle involved, and show the "why and wherefore" of all he does. This course will break up all stereotype processes in the recitation, and give independence of thought to the pupil. At an examination, the character of the student will be apparent. What he *knows* will appear, as well as what he does *not* know.

It may be thought that this is a severe ordeal, and that it will cost labor, pain, and suffering, to come off successfully. This is true, but what is there that is desirable which it does not cost labor and suffering to obtain? But because of this, shall we construct

a continuous inclined plane, carefully polish its surface, and place our children upon it, that they may easily slide through their course, simply by the force of gravity, and thus preclude all the invigorating effects of a struggle with difficulties? We trust not; but rather hope to see them so educated that they shall be ready "for any fate," fully prepared to grapple with whatever they may meet in their course, and manfully "do or die" for the *right*.

The relative position of the teacher, pupil, and parent must not be forgotten. These are all *interested parties*. The teacher may be upright, conscientious, and without guile; still, it must be admitted, that he occupies ground that *inclines* to temptation. He has a natural desire to be commended, and has, it may be, much depending upon the result. His amiable and selfish motives all combine with the feelings and desires of his pupils and their friends, that they may sustain themselves creditably, and the school bear off the honors. The teacher, then, from considerations inseparable from his position, is anxious to have each pupil do well; and the pupil and his friends are equally interested in the issue; all are desirous that he may win distinction and avoid disgrace. Here there may be danger, if not of collusion, perhaps of special preparation upon particular lessons, chapters, or studies, out of the regular order, to the neglect of other important studies in their regular course. "Many a pious fraud has been committed under far feebler stress of temptation." "The end does (not always) justify the means."

We can hardly conceive of any thing more worthless than a *windy, wordy* exhibition, alias examination; it is as devoid of soul as principle. It is a common saying that "those who study for the recitation's sake, turn out ordinary men." They load and unload their minds, as many times a day as the laborer does his wheelbarrow, and with as little improvement of the vehicle in the former case as in the latter. Dr. Whewell, a celebrated educationist and writer, of Great Britain, on this point thus speaks: "Knowledge acquired merely with a view to examinations and recitations, is usually very shallow and imperfect, and soon passes out of the mind, when the occasion which prompted to the effort is passed. Knowledge thus acquired for a special occasion, does not take possession of the mind as that knowledge does which is imparted in a gradual manner, by a continued series and course of study, each step being viewed with reference to its difficulties and applications, and secured before a progress is made to the next." Again: "Tuition directed, as we are now supposing, to the mere object of preparing students for the examinations, will only aim at providing them with answers to such questions as are likely to be asked by the examiner. In such tuition, it will not be deemed a matter of any consequence that the student has a permanent and thorough hold on fundamental principles, or that he really sees his way through the difficulties that belong to them."

All this results from false notions, ignorance of the laws of the human mind, and a servile dependence on the text book. For ex-

ample: a lesson may be given out; if it be recited in the language of the author, it is pronounced "very good," and yet the pupil may not have the first idea of the meaning of the author, and be entirely ignorant of the spirit of the subject, and the practical application of its principles. The teacher should be the living book and soul in the recitation; he should be the *principal* source, and the book only the auxiliary. The book is a dead letter to the child; he may mechanically pass over its pages, but no impression is made; it is all cold and dead. But let these same truths come fresh and warm from the lips of the inspired instructor, and the attention of the dullest child is secured, and *his* heart is warmed to the same temperature of the teacher. He reads in the earnest manner, cheering tones, and flashing eye of the living teacher, lessons that he never found in his books, and such lessons he can never forget. He drinks in knowledge as from a living fountain. The true teacher is the "*Representative man*;" in the instruction of this class, the pupil sees how the subject in which he is engaged, absorbs the soul of the teacher. Its importance fills his own heart with a holy emulation; at the altar before which his instructor worships, he, too, bows; and a holy flame is enkindled, which, like the fire in the bush that Moses saw, burns most brightly, but consumes not.

If all teachers were of this class, what a halo would surround the schools! Like a city set upon a hill, their light could not be hid; the surrounding darkness of ignorance would retreat before the light, and our schools become indeed, "*our glory and our fame!*"

SCHOOL EXHIBITIONS.

A correspondent of the *Illinois Teacher*, writing in the May number, suggests a view of a topic on which we hope our teachers will express themselves. We refer to that of "School Exhibitions"—the "show," so much thought of as the closing exercise of many of our schools, from the young ladies' seminary to the little backwoods district. We believe in *examinations*. These, properly conducted, benefit all parties interested in the school; but the miserable, sham performance, so often substituted for them, is worse than useless. The writer above alluded to says he was once guilty of taking up the last six weeks of the term in preparation for one of these displays; while the children's time was wasted, and the patrons were deceived in regard to the real benefit they had received, though the teacher gained the plaudits of the *crowd*, who came to find an hour's *amusement*.

Now, we believe in rhetorical exercises, declamations, &c., at set times, and as an element in the instruction of the young, but we do not believe, as one of the writers in the last number has it, that something of that kind should be "got up" to get parents to visit the school. Is not this saying plainly to your pupils that you do not consider their ordinary lessons capable of interesting their parents? And may they not thence conclude that they themselves need not consider them so? If parents will not visit schools except to listen to such extras, let them come at the regular hours appointed for them. Such hours, no doubt, there should be, and more of them than we have had, but I feel guilty unless I *try* to make every recitation interesting to the class and myself, too. But "who is sufficient," &c.

But how should an examination be conducted? I do not know much about it, but it seems to me that rhetorical exercises may, very properly, come in to wind up with; yet I would not have new pieces learned for the occasion, save, perhaps, the first and last, but let a selection be made from those which have been presented during the term, thus stimulating pupils to master the sentiment as well as the words of every piece they speak, so as to be prepared for examination without having to neglect their regular lessons during the last week of school. Let it be understood by visitors that all this great display has not been brought forth, like the gourd, "in a night," but is presented as a *selection* from what has been a matter of steady interest all through the term.

Let classes review their regular studies before the close of the term, but let them know that it is not done merely for the sake of reciting them, but to deepen the impressions already made on their minds. Let them, then, be examined on principles, and in such a way as to test their actual understanding of what they have been over. Let them understand that if they do really "know" what they have learned, they should be able to tell it without any aid from others, and in more ways than one; for a pupil who is lost the moment a stereotyped form of answer has escaped him, is not a *scholar*.

C. M. B.

We should practice temperance, if it were for nothing else but the very pleasure of it; it is the glory of man that hath abundance, to live as reason, not as appetite directs.

MATHEMATICAL DEPARTMENT.

W. D. HENKLE, Editor.

No. 31.

Prof. Robinson remarks, that if Judge Clark in his solution of this problem "had divided each of the given numbers by 10, he would have obtained the same equation without the ciphers. This equation, $x^4 - 240x^3 + 1111000x^2 + 696000 = 31080000$, can now be reduced by placing $x=10P$. Then

$$P^4 - 24P^3 + 111P^2 + 696P = 3108. \quad P=3.756 \text{ and } x=37.56."$$

No. 34.

Prof. Robinson discusses this problem thus: "If it is possible to divide (a^3) into two other cubes, then $x^3 + y^3 = a^3$ is possible, x, y , and a all being rational numbers. If so, then $x^3 = a^3 - y^3$ is also possible. If this is possible we must find the cube root of $(a^3 - y^3)$; but a cube root demands *three equal* factors. This expression has two factors, $(a - y)$ and $(a^2 + ay + y^2)$. Now, if two factors multiplied together form a cube, each one must be a cube, as P^3Q^3 , or the one must be equal to the square root of the other, as P^2Q . That is, this last product will be a cube provided the square root of P^2 equals Q . That is $P=Q$, but not otherwise. Therefore, if $(a^3 - y^3)$ is a cube, the $\sqrt{a^2 + ay + y^2} = a - y$. But this last equation is not true, therefore, the cube root of $(a^3 - y^3)$ is impossible. Q. E. D."

Mr. Staff writes, "I do not consider 34 impossible, but difficult, involving 6th powers." Let *Mr. Staff* then show the fallacy of *Mr. Robinson's* reasoning.

SOLUTION OF No. 37.—BY G. W. HAYES.

He purchased just the right amount, as there is no difference between $\frac{1}{2}$ of a square yard and $\frac{1}{2}$ yard square.

[This was also solved by *L. D. Willard*. *Volina Hobart* and *T. Coggeshall* say $\frac{1}{4}$ of a square yard was left.]

SOLUTION OF No. 38.—BY VOLINA HOBART.

$$1\frac{2}{3} \times 4 = 5. \quad [\text{Other answers might be given.}—\text{ED.}]$$

SOLUTION OF No. 39.—By J. STAFF.

Describe the four circles successively one inside of the other, so as to touch at the same point, which is very easily done, by first describing the given circle. Draw a diameter and take any three points between the centre and either end, and describe so as to touch at the end.

[This solution is warranted by the language of the problem, but we know it was intended by *Mr. Stribbling* to be confined to external contact, and that no two of the centres of the three circles should be in a diameter of the given circle. *Mr. Staff* has also solved the problem for the external contact of the interior circles, but the centre of two of them were in a diameter. *Judge Clark* has sent a complete solution, but it involves the higher geometry. We hope it will yet be mastered by elementary geometry.—ED.]

SOLUTION OF No. 40.—By J. STAFF.

The Nautical Almanac is constructed for the Moon's horizontal parallax, on the supposition that the Earth is a perfect sphere, which was formerly considered sufficiently correct. Supposing it to be a regular spheroid, (a fact not yet fully demonstrated,) then the line normal to the place of the observer would pass the centre C at some distance. For upon C describe a circle with the radius = to rad. of the Earth and extend CO to O' in the circumference, and draw O'M' a tangent meeting CE in M', also a tangent at O of the ellipse, making an angle with the other equal to the vertical DOC. If we adjust to OD by applying the same angle to the latter tangent line as to the first, we have the point from which the Moon would be seen—the distance of the radius of the Earth from the observer on the normal OD. But perhaps we do not understand the question.

[To understand *Mr. Staff's* solution, reference must be made to the figure given in the May number, and the additions mentioned should be made. He has not sufficiently defined what he means by the radius of the Earth. Does he mean the equatorial, polar, or mean radius? *Mr. L. D. Willard* thinks that "Z is the true place, and that the Moon would be seen from D." He refers to *Robinson's Surveying and Navigation*, p. 220, and to *Olmsted's School Astronomy*, p. 36.]

PROBLEMS A, B, C, D, and E.

These problems were all solved by Jacob Staff, who added a few more that are solved on the same principle. No other contributor has sent anything concerning them. They are fine problems, and involve a well-known principle. Can not more of our contributors apply it?

SOLUTION OF F.—By J. C. SANDERS.

Let x = the time it will take to burn an inch at the lesser end, then $x+20$ = the time it will take to burn an inch at the larger.

Adding and dividing by 2 we have $x+11$ = the average time of burning an inch. But dividing 9 hours or 540 minutes by 15, gives 36 as the average time of burning an inch. Then $x+10=36$, or $x=26$.

[*L. D. Willard* solved this problem in the same way, but got $x=8$, which was caused by his inadvertently neglecting to divide the sum of x and $x+20$ by 2.

The above solution it will be perceived is based upon the supposition that the times of burning the successive inches are in arithmetical progression, which is not exactly true; but in this case 26 minutes is not a half a minute less than the true time. *Betty Hosbrook* and *J. Staff* considered the candle as a truncated pyramid, and solved it rigidly, the former getting 26 minutes, 24 seconds, and the latter 26.4345 minutes, that is 26 minutes, 26 seconds.—ED.]

G.

G. W. Hayes, *A. Miller*, and *T. Coggeshall* give 36 minutes as the answer, and *L. D. Willard* 37 minutes, 20 seconds. One other gentleman gave 36 minutes as the result, but did not wish his name given if his solution was not right. We would rather credit a man for an attempt that has failed, than for too much laziness to make an effort.

This problem is one that is "tall" enough for even Professors of Mathematics. It should be remembered that the water runs faster from a vessel the fuller it is. This fact our valuable contributor, *Jacob Staff*, has considered, and sent a rigid solution, which agrees very nearly with one by *Lenmel*. *Staff's* answer is 1 hour, 6 minutes, 13.725 seconds, and *Lenmel's* 1 hour, 6 min-

utes, 14.09106 seconds, which last is the most accurate, having been obtained by using 7 decimal places. We hope those who have not yet solved it, and are fond of "tall" problems, will cultivate its acquaintance.

PROBLEM No. 44.—By W. DOWNS.

Find two fractions which added make eight-fifths, and the sum of whose numerators is equal to the sum of their denominators. This problem is taken from *Stoddard and Henkle's Algebra*, p. 239.

PROBLEM No. 45.—By L. D. WILLARD.

Through a given point in a given circle so to draw a right line, that its parts, between the point and the periphery, shall have a given difference.

PROBLEM 46.—By BETTY HOSBROOK.

Required the length of a direct line cutting off a segment of 20 acres from a circular farm containing 125 acres.

PROBLEM No. 47.—By A. M. MILLER.

Find a number which multiplied by one-half of itself will make precisely 20. An arithmetical solution is required.

PROBLEM No. 48.—By AGRICOLA.

Two men mow a square meadow, but one being a faster mower than the other, agrees to take the outside swath, and cut off all the corners. Required what part of the field each will mow, there being twelve swaths in each side of the field.

PROBLEM H.—By SAMUEL ALSOP.

Let there be any two straight lines on a plane, in each of which three points A, B, C, and A', B', C', are taken. Then if AB' and A'B cut in M, AC' and A'C cut in N, and BC' and B'C cut in P, M, N, and P are in a straight line.

MONEY REMITTANCES BY TELEGRAPH.—In England, the Electric and International Telegraph Company have organized their establishment in such a manner as that money deposited with the company will be advised by telegraphic order, and be paid out to the parties named in the order.

EDITORIAL MISCELLANY.

EXTRACT FROM THE MINUTES OF THE MADISON COUNTY TEACHERS' ASSOCIATION.

The Association met at the Baptist Church in Pendleton, June 27th.

E. M. Butler took the chair, and J. R. Reasoner was chosen Secretary *pro tem*.

After an invitation, a large number of teachers and friends of education gave in their names and became members of the Association. The reading of reports was then called for.

E. M. Butler made a "Report on Elocution;" which was received and adopted.

S. B. Mattox made a "Report on the best method of teaching Geography;" which was received, slightly amended, and adopted.

J. R. Reasoner made a "Report on Physical Education;" which was received and adopted.

S. W. Hill made a "Report on the best method of teaching;" which was received and laid on the table for action at the next Monthly Meeting.

The Executive Committee then made a report of the following *Programme* for the next Monthly Meeting.

1. Report on the importance of Teachers' Associations; by J. W. Hurxhurst.

2. On the best method of teaching English Grammar; I. N. Terwilliger.

3. On the best method of instructing young scholars; by I. N. Terwilliger.

4. On the importance of introducing singing, as a science, into our schools; by William Stewart, of Indianapolis.

5. Exercises on Mental Arithmetic; by E. M. Butler.

6. Exercises on Elocution; by D. M. Roberts.

7. Exercises on English Grammar; by S. W. Hill.

8. Exercises on Geography; by Joshua L. Fussell.

The thanks of the Association were then tendered to the citizens of Pendleton, for their hospitality in entertaining the members of the Association.

On motion of Dr. M. G. Walker, the following resolution was adopted:

Resolved, That the Minutes of the Association be presented to the editors of the *Democratic Standard* and *Indiana School Journal* for publication.

On motion of S. B. Mattox, the Association adjourned, to meet at Anderson, Saturday, July 25th.

J. R. REASONER,
Secretary pro tem.

TEACHERS AND SCHOLARS, EVERYWHERE, TAKE NOTICE.—A real Calisthenic Machine has just been invented, by GEORGE BUCHANAN, of Hickory, Pa., affording the greatest amusement for scholars, and, at the same time, securing expansion of the chest; being, indeed, a most healthy and pleasant exercise for all classes; young and old, male and female. Whether you sit or stand on this machine, your shoulders are thrown back, and you are held *erect* without any effort or pains on your part, and if you try, you can fly through the air more than one thousand feet per minute, or as slow as you please. If the place is level, your feet may always be within six inches of the ground. Any child fit to go to school can manage it, and it will accommodate few or many as you please. It is perfectly safe. Any tolerable mechanic can make one in a short time, and at a trifling expense. Suffice it to say, that the great *desideratum* of uniting healthy exercise, graceful movements, and the finest amusement, all in one, is here accomplished. As this machine has been invented for the benefit of scholars particularly, I will send a picture of it, with directions how to make and use one, to any school for \$1. Let the pupils give, say three cents apiece to their teacher, and let him send for it. I have been a teacher for more than fifteen years, and am very certain, that every teacher and pupil will appreciate the value of this machine at once. Address

Hickory, Washington Co., Pa.

GEORGE BUCHANAN.

NEW ALBANY FEMALE SEMINARY.—We have received the Circular of the New Albany Female Seminary, a recently incorporated institution, in New Albany. Among the Board of Instruction we see the names of some of the most successful teachers in the Public Schools of New Albany. It is perhaps known to many of our readers, that through want of sufficient appropriations, these schools were closed some two or three months since. Popular and successful teachers are thus lost to the Free Schools by a policy which has not even the virtue of economy to recommend it; for who can doubt, but that the services of a new corps of Teachers next year will be far less valuable than those who had already inaugurated a good system, and made the schools among the best in the State. The money saved in this three months' deficiency in the appropriations will be lost twice over before the schools are again placed on the same basis they were before.

But to return to this Female Seminary: We have no very high opinion of a large proportion of these Female Institutions, which some one has aptly called "Whitewashing concerns," but with a stern, matter-of-fact, straightforward man like our former associate in the *School Journal*, Charles Barnes, at the head of the School, there will be no superficial work.

Miss M. F. Wells, whom the readers of the Journal well know, is teacher in the Collegiate Department. Mrs. Barnes and Miss Jane A. Avery, in the Academic Department. We wish our friends at New Albany suc-

cess, but we wish still more that the *Public Schools* might be made sufficiently good to drive their institution and all others of the kind out of the State.

WABASH COLLEGE.—We have received the Catalogue of Wabash College, Crawfordsville, Ind.

Number of Alumni,	-	-	-	110
“ in Collegiate Department,	-	-	-	55
“ Preparatory and Normal Department,	-	-	-	102

The College Library contains more than 4,000 volumes.

Commencement, Wednesday, July 15th. Fall Term commences September 22d.

We have also the Catalogue of The Theological Seminary of the Diocese of Ohio and Kenyon College.

The whole number of Students at this Institution is	-	-	-	177
viz.: Under-graduates,	-	-	-	92
Theological Students,	-	-	-	12
Grammar School,	-	-	-	73

NEW ALBANY FEMALE SEMINARY.—This Institution is to open on the first Monday in September, under the supervision of Charles Barnes, a gentleman so well known to the teachers of Indiana, that it is scarcely necessary to say that the management of the Institution will be in able hands. Among the teachers which are connected with Mr. Barnes, we will mention Miss Wells and Miss Avery, both of whom we have had the pleasure of meeting several times at the State Teachers' Association. We are disposed to think that the amiable character of these ladies will be a valuable element in gaining the esteem of the young Misses who may be connected with the School. The intellectual ability of Miss Wells may be judged by the sensible and well-written articles that have occasionally appeared in this *Journal*, from her pen. We predict a high degree of prosperity for the new Institution, not only on account of its Board of Instruction, but its favorable location to command the patronage of Southern Indiana and Northern Kentucky.

W. D. H.

Mr. W. D. HENKLE, our Mathematical editor, has resigned his position as Professor of Mathematics in Greenmount College, Richmond. We are not informed where he is to locate, but are sure that wherever it may be, he will make his mark.

The Wayne County Teachers' Institute will commence on the 17th of August, and continue one week.

The New York State Teachers' Association will be held at Binghampton, on the 28th, 29th, and 30th days of July.

INDIANA STATE TEACHERS' ASSOCIATION will meet in the city of Richmond, on the 25th, 26th, and 27th days of August next. This meeting of the Association will be one of the most important of any ever held in the State, and the Executive Committee deem it best to have the session continue three days. The citizens of Richmond will entertain all the delegates gratuitously.

The Executive Committee will be ready to make a full report of its proceedings since the first of January, and will present important considerations pertaining to educational interests in our State, for the action of the Association. President J. G. May will deliver his opening address on Tuesday, 10 o'clock, A. M.

A report will be made by E. P. Cole, "On educational condition and prospects in Indiana."

By G. A. Chase, on "Obstacles to the progress of Education in Indiana."

By Miss Belinda Yocum, on "The importance of Teachers knowing more than they are required to teach."

By Mrs. Kate Henkle, on "Drawing and Painting as a branch of education in our schools."

By M. Hollingsworth, on "Improvements in instruction and government in Schools."

E. E. Edwards will read a poem.

Rev. Dr. Edwards, President of Hanover College, will deliver an address on Wednesday eve.

Every subject reported upon will be discussed at length.

The following subjects will be presented for extended discussion:

1. The subject of Normal Schools, as recommended by Prof. Mills in his last annual report.

2. The obligation of the State to make provisions for the education of all her children, and to have means to keep the free schools open eight months in the year.

3. Improvements requisite in the examination of teachers, and in the standard of qualifications.

4. The policy of adopting, in the government of schools, the "Self-Reporting system."

Teachers in their several counties are requested to have the above notice of the meeting of the Association, published in the local papers of their counties during the month of July, and to call the attention of teachers and friends of education to the same. Let there be a little effort made by live teachers to get a large meeting. The good work of school reform has been nobly commenced: it remains to be seen whether it will be carried on to final success.

JOSIAH HURTY, *Ch'n Ex. Com.*

M. CHARLES, *Sec'y.*

The city of Dubuque, Iowa, made an appropriation of \$30,000 last year for school-houses.

NOTES BY THE WAY.

To have a good *reason* for one's opinion, must be a great satisfaction, however false the premises or ridiculous the conclusion. One reason given by the enemies of free schools, for their opposition to the system, is, that "they wish to pursue their own plans in *schooling* their children," and dislike being obliged to conform to a prescribed plan: others do not wish to school them at all; "it makes men bad;" "counterfeiters and office-holders are nearly all educated men;" "and it is wrong to tax men for what they don't believe in." One man in Putnam county opposed free schools on account of their oppression. *He* paid 70 cts. State tax for Schools, and had seven children growing up in ignorance. Another, in the same county, who had eight children to "school," paid \$2.70 State tax for Schools, and he was shamefully taxed for other people's "young ones." Such is invariably the character of the constituents of those Legislators who oppose free schools and general education.

In Bainbridge, the Cumberland Presbyterians are erecting a fine edifice for an Academic School. Mr. Randolph, an active, efficient teacher, from Ohio, has been doing a good work there, and will take charge of the Academy. We found him at work in a miserable room, poorly furnished, but cheerful and determined to "go ahead."

At Ladoga, in Montgomery county, we found a neatly constructed and well kept Seminary Building, and in it one of the best schools for girls that we have found in Indiana. The Misses Williams, Teachers, have learned their business, and engage in their work with intelligence and spirit.

Public Schools are in a bad condition. A poor old log house, and a poorer School, is the best they have for a Free School. We found there an active, intelligent School Trustee, Mr. J. H. Oliver, who is "pushing" matters as fast as possible.

Crawfordsville is the county seat of Montgomery county. The Free Schools were in session, and we had a fine opportunity to see how things are "done up" there. Two of the "City Fathers" visited schools with us, and seemed much edified but not proud of their schools.

The present council had just entered upon its duties, and is not responsible for the miserable things called schools, that we found in that place. A few notes taken on the spot, when filled out by the reader's imagination, will give an idea of what we saw. 1st room, 14x16, benches, broken chairs, and boards, laid from one chair to another, constitute seats. Stands, tables, and boards, poorly nailed together, constitute desks. No order but disorder—class in a huddle for want of room—floor dirty—classes disorderly—recite and read badly—thump! thump! goes the stick, with most positive orders to behave, every half minute. One boy putting a stick into another's ears—children seem to enjoy themselves well—think it's all right.

2d room was an old paint shop, deserted by workmen, hence made a

good school-room. Room larger, floor covered with mud, loose desks, chairs, benches, stools, and stands, constitute the furniture. Some bright boys; they deserve a better school. Nos. 3 and 4 about as No. 1 (14x14), only a little more crowded, and scholars good natured—boys and girls together—loud talking common, and plenty of fun—scholars leap over desks and tables.

No. 5 is an old school-house, out of the corporation. There were 32 window lights broken out, and children were not suffering from want of ventilation. School a little better than some of the others. *Sic est.* Female teachers are paid \$60 for 70 days teaching. One male teacher gets \$120 for 70 days teaching.

We lectured in the evening before Students and Faculty of the College. Only about a dozen citizens of town had interest enough to attend.

We next visited Madison county. Anderson, the county seat, is a pleasant town, and is improving. There have been no free schools in this town for two years. A good school-house was burned here.


We met with a cordial welcome from teachers and others. A fine audience greeted us on the first evening, in the Methodist Church. Mr. Huxhurst and Lady are teaching a large school here, in poorly fitted rooms, and are deservedly popular. Mr. Hill is also teaching here, and is warmly engaged in the improvement of schools and school teachers.

A second meeting was appointed by the citizens, and we were invited to address them. On that occasion a subscription was opened for building a Union School-House. Arrangements were also made to organize a Teachers' Association.

We doubt not, but Anderson will soon have one of the best schools in the State, and the County a prosperous and efficient Association. The people are intelligent and enterprising, and we found none of that niggardly policy about schools and taxes, which obtains in some other places. A large subscription list was made for the *Journal*, and much encouragement given by citizens to our educational enterprise. J. H.

TITLES.—The following, cut from an old paper, we commend to the serious attention of some of our brother teachers, who are so fond of sporting the title, Professor:

TITLED MEN.—The title of Prof. is getting to be more indiscriminately applied than that of D. D. Lately Prof. S. was announced to give a lecture at the Society Library in New York, on the use and abuse of spectacles. He did what he proposed to do, and did it very well, because he was a spectacle-maker by trade. We shall not be surprised to see it announced that Prof. Patrick O'Neal will lecture on the relation of hod carriers to the rapid growth of our large cities, to which the members of the *profession* will be particularly invited.

 We call attention to the advertisement of Mr. Kelsall, of Cincinnati. Any in want of good school-furniture, will find themselves well accommodated here. There is no need of sending to Boston or New York, since an article quite as good can be furnished nearer home.

BIBLE QUOTATIONS.

The gross blunders, which our public men, literary and political, sometimes make in attempting to quote from the Sacred Scriptures, show a lamentable and highly disgraceful ignorance of this, the best of all books. Many men of literary pretensions, who would feel almost disgraced in being detected in a blunder in quoting from Shakspeare or Milton, will, at times, perpetrate some very ludicrous mistakes in their attempts at drawing illustrations from the Word of God. Knowing that it is the great repository of truth and wisdom, and an exhaustless treasury upon which to draw for comparisons and apposite illustrations, they frequently go there for materials with which to eke out their own scanty thoughts and language.

This almost constant recourse to this book for quotations might make them, one would think, more familiar with its contents, and enable them to do it justice in their borrowings, but such it seems is not the case. By an erroneous quotation from the Bible, besides the appearance of moral obliquity, which it assumes, the impression sought to be made is very much weakened, if not entirely lost. Besides, the Bible is more generally read than any other book; and a false quotation from it grates harshly upon the ears of those who are familiar with its language, and who love and revere its teachings. We will subjoin a few of the false quotations, which have fallen under our notice.

Lord Kenyon, who was much better read in the law than in the gospel, in charging a jury once perpetrated the following: "Finally, gentlemen, I would call your attention to the example of the Roman Emperor Julian, who was so distinguished for the practice of every Christian virtue, that he was called Julian, the *Apostle*."

But we need not go across the Atlantic for such examples. Our own public men furnish them in profuse abundance. Some years since, a Mr Hodge, a member of Congress from Illinois, got off the following in the course of debate: "Mr. Speaker, as the Bible beautifully expresses it,

'While yet the lamp holds out to burn,
The vilest sinner may return.'"

Another—a member of the Legislature of this same Sucker State—in an address to his constituents at the close of the session, remarked: "We hope the course we have pursued and the votes we have given will meet your approbation. We hope you will say unto us, as Nathan said to David, 'Well done, good and faithful servant.'"

The following from Ohio:

"Mr. Speaker," said a member of the Ohio Legislature, "I would no more vote for that measure than I would fall down and worship the golden calf that Abraham made."

"Mr. Speaker," said another member, "it was not Abraham that made the golden calf; it was Nebuchadnezzar."

Ascending from things of "low degree" to those higher, we refer to the great Mr. Benton as the happy parent of the following, brought into existence in the Senate:

"Mr. President, I am forcibly reminded of the miracle performed by our Savior, when he cast *seven devils* out of a certain man, and entering into a herd of swine, they ran violently into the sea and perished."

An editor of a Cincinnati paper, in giving an obituary notice of a very excellent man, said: "We may say of him, as the Holy Scriptures have so beautifully expressed it, 'An honest man is the noblest work of God.'"

Another Cincinnati editor, a *clergyman*, too, spoke of the "*Prophet Daniel*" as having persecuted the Saints before he became a Christian."

Waddy Thompson, formerly Minister to Mexico, in his Recollections of Mexico, in speaking of the Hospital of Lazarus, which he visited, says: "The inmates would have rived, in sores and rags, the *brother of Mary and Martha*."

A few years since, while acting in the capacity of School Examiner, in Ohio, a teacher, making no small pretensions to literature, presented himself for examination, to whom we gave, for analysis, the following sentence:

"What a piece of work is man! how noble in reason, how excellent in faculties; in form and moving, how express and admirable; in action, how like an angel; in apprehension, how like a God." After he had blundered through the analysis, we inquired who was the author of the sentence just disposed of. He promptly answered, that "it was taken from the Book of Job."

Another "*School-keeper*" in the same State wrote, as a specimen of penmanship, the following: "Evil communications corrupt good manners;" and directed us to Noah Webster for its paternity.

A few weeks since, the following occurred in our State University: A student, in a college exercise, was speaking of avarice, and said, "that our Savior truly declared, that the almighty dollar is the root of all evil."

Such are a very few of the numerous mistakes of a similar character which abound in all departments of life, but much more frequently in what are termed the "*literary walks*," than in those more humble in their character and pretensions. They would be simply ludicrous, if they did not involve such serious interests. And we think it but a reasonable request to make of all such persons, to either not quote at all from God's Word, or see that they do it entire justice in their quotations. E. P. C.

For a first rate reading book, let Teachers and School Trustees examine the new one published by Morton & Griswold, Louisville, Ky. This has been prepared with the greatest care, and the selections are made with excellent taste and judgment.

Teachers, do not forget the Semi-annual Meeting at Richmond. A good time is expected.

ITEMS.

The following table, obtained by the investigations of a committee appointed by the Legislature of Massachusetts, shows the average duration of life among various classes of society. It will be seen that *Clerks* and *Operatives* alone rank as low in the scale as *Teachers* :

Gentlemen, - - -	68.19 y'rs	Carpenters, - - -	49.39 y'rs
Judges and Justices, -	65.00 "	Masons, - - -	47.78 "
Agriculturalists, -	63.93 "	Traders, - - -	46.35 "
Bank Officers, - - -	63.76 "	Tailors, - - -	44.35 "
Coopers, - - -	58.37 "	Jewelers, - - -	44.05 "
Public Officers, - - -	56.87 "	Bakers, - - -	43.35 "
Clergymen, - - -	55.72 "	Manufacturers, - - -	43.28 "
Shipwrights, - - -	55.27 "	Shoemakers, - - -	43.12 "
Physicians, - - -	54.94 "	Painters, - - -	42.68 "
Rope Makers, - - -	54.50 "	Editors, - - -	40.00 "
Lawyers, - - -	54.43 "	Musicians, - - -	39.86 "
Hatters, - - -	54.27 "	Printers, - - -	38.01 "
Merchants, - - -	51.71 "	Machinists, - - -	36.41 "
Blacksmiths, - - -	51.44 "	Teachers, - - -	34.46 "
Calico Printers, - - -	51.33 "	Clerks, - - -	34.36 "
Butchers, - - -	50.00 "	Operatives, - - -	32.93 "

St. Paul's, Minnesota Territory, has appropriated \$36,000, this year, for building school-houses. Pretty good for a city not more than five or six years old.

The annual meeting of the American Institute of Instruction will be held this year at Manchester, N. H., on Tuesday, Wednesday, and Thursday, the 18th, 19th, and 20th of August. Among the lecturers are Prof. O. M. Mitchell, L. L. D., Cincinnati Observatory, and J. W. Bulkley, Sup't of Public Schools, Brooklyn, N. Y.

"A negro, who had learned to read, wishing to give some of his countrymen, who had never seen a book, an idea of it, said: 'Reading is the power of hearing with the eyes, instead of the ears.'"

"Once was the time, when parents appeared to govern and discipline their children, but now the order seems reversed; and teachers who are not quite fools have anticipated the change, and manage rather to please the child, than to instruct and benefit him.

"It is a lamentable truth that many parents as well as teachers are constantly in the habit of hiring and coaxing children to do those things incumbent upon them. Children have obligations; and if, in their fulfillment, they are disposed to look upon them as a necessity rather than a duty, the order of government is liable to be perverted. Whatever duty may devolve upon a child to do, it should be performed at all hazards, whether it pleases or otherwise."—*School Report of Stonington.*

NORMAL UNIVERSITY OF ILLINOIS.

The Normal University of Illinois is to be located at Bloomington; that place having outbidden all others in the pecuniary aid which it offers for the establishment of the Institution.

We extract from the *Illinois Teacher* a portion of the action taken by the State Board upon the subject:

The Committee on Officers being called upon, Mr. Moulton, the Chairman, submitted a majority report, as follows:

The majority of the Committee to select Officers for the Normal University have considered the subject, and recommend C. E. Hovey to the Board as a proper and suitable person as Principal of the Normal University. All of which is respectfully submitted.

S. W. MOULTON,
JOHN R. EDEN,
S. WRIGHT.

On motion of Mr. Moulton, the report was laid upon the table. There being no minority report made, Mr. Moulton moved to take up the report of the Committee on Officers.

On motion of Mr. Moseley, the Board proceeded to the election of Principal of the State Normal University. Dr. Rex, on behalf of the minority of the Committee, now recommended Wm. F. Phelps. A ballot having been taken, C. E. Hovey, of Peoria, received six votes, and Wm. F. Phelps, of New Jersey, five votes. On motion, the election of Mr. Hovey was made unanimous.

Two o'clock, P. M.—Mr. Moseley offered the following resolutions, which were adopted:

Resolved, That a building large enough to accommodate from three to five hundred normal students, three stories high, exclusive of basement, be erected for the use of the Normal University; the basement to be of stone, the remainder of brick—faced with cherry-red pressed brick.

Resolved, That S. W. Moulton, C. B. Denio, George P. Rex, N. W. Edwards, W. H. Powell, D. Wilkins, and C. E. Hovey be a Building Committee, with full power to carry the above resolution into effect.

On motion, the citizens of Bloomington were requested to appoint a committee to confer with the Building Committee appointed by this Board, in regard to the plan and construction of the building for the State Normal University.

Mr. Moseley moved that the salary of the Principal of the State Normal University be fixed at \$2,500 per annum, and that the salary commence when the Committee on Officers of the Institution shall notify the Principal of their desire that he should enter upon the discharge of his duties.

On motion, the following resolution was adopted:

Resolved, That the Building Committee last appointed be directed to announce the commencement of the first term of the Normal University at such time as they shall think proper, and take all necessary steps for securing the appointment of students for the various counties.

On motion,

Resolved, That the Secretary be directed to give notice to all the members of the Board of the time of the next meeting.

Resolved, That the Committee on Officers, in connection with the Principal, have power to select the teachers and determine their salaries.

Mr. Hovey signified his acceptance of the Principalship of the Institution.

The Board then adjourned.
D. WILKINS, Sec'y *pro tem*.

N. W. EDWARDS, Pres't.

TEST PAPERS.—On the otherwise barren rocks which fringe the shore of the Cape de Verd Islands, grows the archil—a famous sea-weed of lichen, renowned among dyers. By a particular process of manufacture this archil yields a beautiful blue pigment, known in the chemical laboratory by the name of *litmus*. Few colors are more fugitive than litmus. Being a fine violet-blue, it is changed to red by so minute a portion of any acid that it becomes, when properly applied, a *test* of the presence of the latter substance. As it is so frequently desirable to know whether a fluid be acid or alkaline, one of the first practical lessons to a student in chemistry is to prepare litmus test paper, thus: Put into a tumbler half an ounce of litmus and three ounces of water: let them remain together in a warm place for a few hours, then filter the dark blue liquid from its impurities, divide the solution obtained into two parts, pour one portion into a saucer, and soak strips of white writing paper in it until it has acquired a distinct blue color. If not colored enough by once dipping and drying, repeat the operation. When dry, preserve these strips in a box labeled "blue litmus test papers." These serve to *test* any fluid to ascertain if it has an *acid* reaction. It is instructive to learn how very small a portion of any acid in water will be indicated by the reddening of the litmus. With the second portion of the liquid mix cautiously a few drops of lemon juice until it is red; then color paper as before. When dry, this "red litmus test paper" serves to indicate the presence of alkalies, a class of bodies opposed to acids. Red litmus test paper, on being put into any fluid that is *alkaline*, such as lime-water, is immediately restored to its original blue color. Put the ashes of a cigar into water; the liquid when "tested" will indicate the presence of an alkali. To test stale milk: if blue paper becomes red, the milk is sour—it is acid.—*Scientific American*.

CONNECTICUT PUBLIC SCHOOLS.—The report of the Superintendent of Common Schools in Connecticut gives the number of school districts in the State as 1626, and the number of children between four and sixteen years of age, as 100,545. The school fund amounts to \$2,046,397, and the income thereof to \$149,484. Besides this there is a town deposit fund of \$763,661, the revenue from which amounts to \$35,000. The amount raised by taxation for schools is \$121,440, and the amount of revenue from local funds applied for the support of schools, \$11,327. This makes the sum total of money raised for the support of the public schools \$317,251, or about \$3.14 for each scholar. One noticeable fact is developed, viz.: that the number of "very good" school-houses in the State is but little larger than the number of "very bad" ones—the number of the former being 450, and of the latter 400. The average wages paid to male teachers is \$29 per month, and to female teachers \$17.25. The report speaks of absenteeism as a great evil in many districts. Large numbers of children are in no school for any portion of the year. Irregularity of attendance, too, is often such as to prevent systematic attention.

THE HOT SPRINGS OF ARKANSAS.—A writer to the *New Orleans Picayune* gives a graphic account of these springs. They are situated in a steep, rocky glen, between almost perpendicular, thinly-wooded mountains, having for accessories a pretty brawling stream, a considerable village strewn on one side of the brook, and one little mill busily at work. The main hot springs gush out of the face of the mountain about eighty or one hundred feet above the base. The water is pure and limpid, and its entire body would fill a pipe of sixteen or eighteen inches diameter, if all issued at one spot. The temperature varies from 105 deg. to 153 deg. of Fahrenheit. The water, although apparently pure to the eye and palate, deposits a mixture of siliceous and carbonate of lime, forming a lava-like stone. Baths are arranged where hot vapor issues from the foot of the mountain, to which the water is carried from the springs above, so that the bather may have either a vapor or a hot-water bath.

ASSYRIAN INSCRIPTIONS.—At a recent meeting of the Asiatic Society of London, Mr. H. F. Talbot presented a sealed packet containing a translation of the inscription on the large cylinder of Tiglath Pileser 1st, in the British Museum. Sir H. Rawlinson, as is well known, is engaged in preparing for publication translations of all the more important inscriptions from Nineveh and Babylon, and the object of Mr. Talbot in sending his version, was that those persons who doubted the reality of the decipherments might be furnished with two readings of the same inscription, made in entire independence of each other. The Secretary engaged to keep the packet sealed until Sir Henry's translation was made known. Dr. Julius Oppert, who is preparing a work illustrative of the French researches in Babylonia, stated he was also engaged on the cylinder of Tiglath Pileser, and requested that he might be allowed to deposit his version, when completed.

BOOK NOTICES.

SCHUYLER'S GEOMETRICAL CHART.—We notice by the *Ohio Journal of Education*, that this Chart is now ready. We have not yet seen it since it has been published, and therefore are not prepared to speak of its mechanical execution; but having seen the author's manuscript, we are ready to express our hearty approval of the plan. Mr. Schuyler is one of Ohio's best mathematicians, and was therefore fully competent to produce such a classification of geometrical figures as would facilitate the systematic study of geometry. If the chart were before us, we would speak in detail of the plan, but this will have to be deferred to some future time. The address of the author is A. SCHUYLER, *Republic*, Seneca County, Ohio.

W. D. H.

BARTLETT'S PHILOSOPHY, in 3 volumes. A. S. Barnes & Co., New York. This is the most extensive work on Natural Philosophy that has as yet appeared from the pen of an American author. It only treats, however, of those parts that are intimately connected with applied mathematics. The first volume, containing 632 pages, treats of the Mechanics of Solids and Fluids; the second, containing 360 pages, of Acoustics and Optics; and the third, containing 465 pages, of Spherical Astronomy. We have not noticed that Calculus is used in any of these volumes, except the third. This often refers to the Author's work on *Analytical Mechanics*, which treats of the Mechanics of Solids and Fluids by the aid of Calculus. It contains 445 pages. All these works are large octavo, and can be obtained separately. The publishers' price for the four is \$10.50.

W. D. H.

FIRST LESSONS IN GEOMETRY, by Thomas Hill. Hickling, Swan & Brown, Boston.

It is not often that a mathematician is a poet, but we have an exception in the case of the Rev. Mr. Hill, who has some very beautiful and tender little poems. By poetry we do not mean such as was used by the mathematical contributors to the Ladies' Diary, 150 years ago; as.

"I happened one ev'ning with a tinker to sit,
Whose tongue ran a great deal too fast for his wit," &c.

Mr. Hill's little work was written for his own children, but as a matter of course it is just as good for children that are not little Hills. He says: "Two children, one of five, the other of seven and a half, were before my mind's eye all the time of my writing; and *it will be found that children of this age are quicker at comprehending first lessons in Geometry than those of fifteen.*" The motto of the book is, "Facts before Reasoning," and although it is a duodecimo of only 144 pages, it contains geometrical facts that would be sought in vain for in Davies' Course of Mathematics, beginning at the Mental Arithmetic and ending with the Calculus. We may hereafter call attention to some of these facts by changing them into problems for our Mathematical Department. We advise teachers to send for this little work and give it a trial.

W. D. H.

A COLLEGIATE COURSE IN THE FRENCH LANGUAGE, BY JEAN GUSTAVE KEETELS. Sheldon, Blakeman & Co., New York.

This is a new work, designed to facilitate the study of the French Language, and is a worthy competitor of Fasquelle's Grammar, which has become so popular. The two works are constructed on the same principle, and a hasty examination indicates that the plan has been carried out with equal fidelity in each. We hope that teachers of French will give this work a careful examination, and if this is done, we are confident that the conciseness with which the book is written will be, with many, an argument in its favor. It contains 368 pages, and Fasquelle's 499.

W. D. H.

We call the attention of our readers to the advertisement of Messrs. Childs & Peterson, in the present number of the *Journal*. They publish books which no intelligent man can afford to be without. "Dr. Kane's Arctic Explorations" is the most interesting book we have read for years. Probably no man holds a higher place in the hearts of Americans, or is more loved and honored abroad, than Dr. Kane. With thousands and tens of thousands of others, we rejoice to learn that we shall soon have a biography of him, prepared by one fully competent for the work. Dr. William Elder, an intimate friend of Kane, has received from the family all his manuscripts, journals, and other documents necessary for an accurate and complete biography.

The book will contain a new, full-faced portrait on steel, with engravings, also, of his tomb, medals, &c. Price \$1.50. Messrs. Childs & Peterson also republish Kane's First Expedition, finely illustrated, and uniform with the "Arctic Explorations."

Among school-books published by the same firm, are "Bouvier's Familiar Astronomy," octavo, 500 pages. Price \$2.00. This book has recommendations from such men as Sir John F. W. Herschel, Lieut. Maury, Prof. Bond, Prof. Olmstead, Dr. Dick, Lord Rosse, Dr. Lardner, Sir David Brewster, and a host of other distinguished Philosophers and Astronomers.

Childs & Peterson have also a large work on "Familiar Science," by David A. Wells, A. M., on a plan similar to the smaller works of Brewer and Peterson. It contains upwards of four thousand questions and answers in almost every department of science. We have used Brewer's work in school, and have found that philosophy thus made practical and applied to the familiar phenomena around them, was always interesting.

The same House publish other valuable miscellaneous and school books, which we have not now time to notice.

Their Address is,

CHILDS & PETERSON,
602 Arch Street, Philadelphia.

S. S. & W. Wood, 389 Broadway, New York, are the publishers of Gould Brown's Grammars. Among them is his great grammar, which is among grammars, what "Webster's Unabridged" is among dictionaries. The author styles this "The Grammar of English Grammars." It is a large octavo of nearly 1100 pages, and is undoubtedly the most complete and the best grammatical treatise ever published. See advertisement in this number.

We have received *Barnard's Journal of Education* for June. It has four portraits of distinguished men, with a great variety of valuable reading matter. We have often referred to this excellent periodical, which we peruse with more interest than almost any educational work. Teachers ought to have it. Address, Hartford, Ct.

THE
Indiana School Journal.

VOL. II. INDIANAPOLIS, AUGUST, 1857. NO. 8.

PUBLIC OPINION.

A living philosopher of world-wide fame says, "For non-conformity the world whips you with its displeasure, and, therefore, a man must know how to estimate a sour face. The bystanders look askance on him in the public street or in the friend's parlor. If this aversion had its origin in contempt and resistance like his own, he might well go home with a sad countenance; but the sour faces of the multitude, like their sweet faces, have no deep cause, but are put on and off as the wind blows and a newspaper directs. Yet is the discontent of the multitude more formidable than that of the senate, and the college. It is easy enough for a firm man who knows the world to brook the rage of the cultivated classes. Their rage is decorous and prudent, for they are timid, as being very vulnerable themselves. But when to their feminine rage the indignation of the people is added, when the ignorant and the poor are aroused, when the unintelligent brute force that lies at the bottom of society is made to growl and mew, it needs the habit of magnanimity and religion to treat it god-like as a trifle of no concernment."

The only way to judge whether a man is of any consequence or not, is by the notice he provokes. Some one having told Dr. Johnson that a new caricature of him had been published, "Sir," he replied, "I am very glad to hear this. I hope the day will never arrive when I shall neither be the object of calumny or ridicule, for then I shall be neglected and forgotten." If we see a man made the object of incessant abuse and ridicule, day after day, week after week, and month after month, the inference is plain that,

for some reason or other, somebody is disturbed by him ; for a man who is of no consequence in any way will not be likely to disturb any one. If we have a man among us who is of no account, we trouble ourselves very little about him, and seldom mention his name. But if the most learned and able of us should go to work and spend three or four days at a time on elaborate articles to prove that he was a simpleton, the question would very naturally occur, why we, who think so much of ourselves, should spend so much of our valuable time and labor upon a simpleton. When people can't let a man alone, when they are not content with simply calling him a fool, a dunce, a jackass, an ape, monkey, &c., &c., but feel under the necessity of renewing these polite and complimentary epithets almost every day, in every conceivable form of prose, poetry, and caricature—"in blank verse and blanker reason,"—it seems like taking a great deal of pains and labor to prove a man's nullity. The fact is, unless a man has a very strong head, being taken so much notice of must make him conceited. How can he help becoming vain when he witnesses the distorted shapes into which prose is labored to give him fame, to see how poetry is overworked in his service—how in every imaginable form it is brought into requisition—dramatic, lyric, epic, didactic, and non-descript—and this not sparingly, but in frequent and incessant doses ? There is no more striking illustration of these remarks than in the experience of Mr. D'Israeli, the brilliant English author and statesman, who for years has been the object with Punch of every variety of ridicule, in verse, prose, and caricature. Fame consists in being talked about ; it don't matter whether favorably or unfavorably ; but to be talked about. Some one once defined fame in calling that man the most famous whose name was mentioned the greatest number of times during a year. Fame is not often acquired without the assistance of infamous attacks. Coleridge says, "To anonymous critics in reviews, magazines, and news journals of various name and rank, and to satirists with or without a name, in verse or prose, or in verse text aided by prose comment, I do seriously believe and profess, that I owe full two-thirds of whatever reputation and publicity I happen to possess." What was the experience of Coleridge is the experience of all.

It is never safe to be praised. Emerson says, "I hate to be defended in a newspaper. As long as all that is said is said against me, I feel a certain assurance of success. But as soon as honeyed

words of praise are spoken for me, I feel like one that lies unprotected before his enemies."

The evil effects of being over-praised are very strongly depicted in the following eloquent passage from Macaulay. In speaking of Byron at the time he suffered himself to be driven out of England, he says: "His countrymen were in a bad humor with him. His writings and his character had lost the charm of novelty. He had been guilty of the offense which of all offenses is punished the most severely; he had been overpraised; he had excited too warm an interest; and the public with its usual justice chastised him for its own folly. The attachments of the multitude bear no small resemblance to those of the wanton enchantress in the Arabian tales, who, when the forty days of her fondness were over, was not content with dismissing her lovers, but condemned them to expiate, in loathsome shapes, the crime of having once pleased her too well. The obloquy which Byron had to endure was such as might well have shaken a more constant mind. The newspapers were filled with lampoons. The theatres shook with execrations. He was excluded from circles where he had lately been the observed of all observers. All those creeping things that riot in the decay of nobler natures hastened to their repast; and they were right; they did after their kind. It is not every day that the savage envy of aspiring dunces is gratified by the agonies of such a spirit and the degradation of such a name. The unhappy man left his country forever. The howl of contumely followed him across the sea, up the Rhine, over the Alps; it gradually waxed fainter; it died away. Those who raised it began to ask each other, what, after all, was the matter about which they had been so clamorous; and wished to invite back the criminal whom they had just chased from them. His poetry became more popular than it had ever been; and his complaints were read with tears by thousands and tens of thousands who had never seen his face."

Such is the course the vacillating public pursues towards all. The strength of Byron's character was not equal to his poetical genius; if it had been, there would have been no agonies nor no degradation for the savage envy of aspiring dunces to gloat over.

If a man places his happiness at the risk of every little insignificant scribbler who may chance to write for a newspaper, he has his happiness planted on an exceedingly firm basis, and existence with him must be rather an elevated affair. He would be no great loser to sell himself to the surgeons. The hardest punish-

ment for scoffers is to treat them with utter neglect. Persevering, silent contempt eats into the hearts of little creatures and makes them desperate. It is a quiet assumption of superiority that is more galling than the most contemptuous sneers or the most bitter sarcasms. It says, in so many words, "Little fellows, amuse yourselves according to the dictates of your vile nature. You think you are of some consequence: I don't. It is an honest difference of opinion, but each can act upon his own convictions. If it affords you any pleasure to bark at me, don't fail to do so; you are perfectly harmless." Anything else is easier to be borne by a poor buffoon than that cool disdain which will not permit a man to stoop to notice him at all, and which prevents him from recognizing the jester's existence even. The rage of the satirist who can not make the least impression upon the object of his satire, most resembles that of a rat gnawing at a file.

"Ridicule is a weak weapon when leveled at a strong mind;
But common men are cowards, and dread an empty laugh.
Fear a nettle and touch it tenderly—its poison shall burn
thee to the shoulder,
But grasp it with bold hand—is it not a bundle of myrrh?
Betray mean terror of ridicule, thou shalt find enough to
mock thee.
But answer thou their laughter with contempt, and the scoffers
will lick thy feet."

A good deal is said about dignity that is *put on*. But little knowledge of human nature is required to know that it is necessary dignity should fit pretty well when it is on—there must be mental projection enough to hang it to, or it is very hard to be worn. The weak man who attempts to put on a dignity that he is not strong enough to bear, may get along well enough in prosperity when all is calm and sunshine. But the man who can put on dignity and sustain it through the roughest trials, amid the jeers and taunts of a scoffing crowd, who can bear with dignified serenity and cheerful indifference "the miscreant cry and idiot laugh," is made of sterner stuff than the multitude dream of in their philosophy. "Self-respect is the keystone in the arch of character," and the man who can maintain that unshaken through a hot fire of invective, scorn, and ridicule must partake somewhat of that spirit which constitutes the Happy Warrior. Garrison and other abolitionists have exhibited this heroism in a striking manner.

It is a safe rule to act upon, that "no gentleman *will* insult you, and no one else *can*."

An ex-chancellor of England, whose brilliant and turbulent career has made him familiar with every species of assault, is believed to have uttered the following pithy and profound remarks on self-respect—remarks more forcible to the writer of this on account of the varied and extraordinary experience of him from whom they came. He says: "Self-respect is the safest prevention against quarreling. The man who is sure of his own position is the slowest to suspect another of any design to question it; and hence the art of avoiding altercations has generally been deemed one of the peculiar characteristics of a gentleman. * * Never to seem afraid of being put upon, as the phrase goes—never to argue a question merely lest the people should think you can't argue it—never to fight simply for fear the lookers-on should think you a coward—these are some of the maxims on which all men of superior minds act habitually and unconsciously; and it is this habit which gives to such men that air of repose and self-possession before which fools stand abashed and dandies are wild with envy."

In the biographies of great men, we recognise their superiority more in the lofty contempt with which they scorned the scorners, than in almost any other trait they possessed; and among great men even, this trait is rarest among the rare. Dr. Johnson was a heroic and noble specimen in whom it was distinguished. He put a proper estimate upon the abuse of his enemies. Macaulay, in the splendid article upon him recently published, says: "They assailed him with libels much more dishonorable to their country than anything he had ever said or written. They published paragraphs in the newspapers, articles in the magazines, six-penny pamphlets, five-shilling books. One scribbler abused Johnson for being blear-eyed; another for being a pensioner; a third informed the world that one of the Doctor's uncles had been convicted of felony in Scotland, and had found that there was in that country one tree capable of supporting the weight of an Englishman."

"A hundred bad writers misrepresented and reviled him; but not one of the hundred could boast of having been thought by him worthy of a refutation, or even of a retort. He had learned, both from his own observation and from literary history, in which he was deeply read, that the place of books in the public estimation is fixed not by what is written about them, but by what is written in them; and that an author whose works are likely to live, is very unwise if he stoops to wrangle with detractors whose works are certain to die."

Alexander Pope was the most famous poet of the eighteenth century. A rival who hated him, said the first letter in the first name and the first and last letters in the last name spelt *ape*, and that was the name by which his enemies most delighted to designate him. John Foster, whom Daniel Webster called the greatest living writer of his day, says: "As the conduct of a man of decision is always individual and often singular, he may expect some serious trials of courage. For one thing, he may be encountered by the strongest disapprobation of many of his connexions, and the censure of the greater part of the society where he is known. In this case it is not a man of common spirit that can show himself just as at other times, and meet their anger in the same undisturbed manner as he would meet some ordinary inclemency of the weather; that can, without harshness or violence, continue to effect every moment some part of his design, coolly replying to each ungracious look and indignant voice, 'I am sorry to oppose you; I am not unfriendly to you, while thus persisting in what excites your displeasure; it would please me to have your approbation and concurrence, and I think I should have them if you would seriously consider my reasons; but meanwhile, I am superior to opinion, I am not to be intimidated by reproaches, nor would your favor and applause be any reward for the sacrifice of my object. As you can do without my approbation, I can certainly do without yours; it is enough that I can approve myself; it is enough that I appeal to the last authority in creation. Amuse yourself as you may, by continuing to censure or rail; I must continue to act.'

"The attack of contempt and ridicule is perhaps a still greater trial of courage. It is felt by all to be an admirable thing, when it can in no degree be ascribed to the hardness of either stupidity or confirmed depravity, to sustain, for a considerable time, or in numerous instances, the looks of scorn, or an unrestrained shower of taunts and jeers, with perfect composure, and proceed immediately after, or at the time, on the business that provokes all this ridicule. This invincibility of temper will often make even the scoffers themselves tired of the sport; they begin to feel that against such a man it is a poor sort of hostility to joke and sneer; and there is nothing that people are more mortified to spend in vain than their scorn."

M.

EDUCATION IN MASSACHUSETTS.

Massachusetts, from its history and position, is necessarily a manufacturing and commercial State. These pursuits are entirely dependent upon the culture of the intellect. The invention of machinery demands a high order of learning, and the best machinery soon becomes impotent in the hands of the ignorant. Commerce, then, depends for the materials of its growth and prosperity on the intelligence of the laboring classes upon the land and in the shops and mills. Thus we connect the productive power of our State with its institutions of learning. These twenty years have been marked by a continuous effort to give to every child the intellectual culture that is essential to a thinking, inventive, creative, virtuous life of honorable labor. The partial success attained has wrought out results that seem credible only because they are based upon careful personal and local examinations.

Ratio of increase of educational appropriations to the accumulation of property in the State.—In 1837 the cities and towns of the State raised by taxation for teachers' wages, board, and incidental expenses, the sum of \$387,124.17; while in 1855 the sum of \$1,213,953.55 was appropriated for the same purposes. There has been in this item of expenditure an annual increase amounting, in the aggregate, to the vast sum of \$826,829.38. In 1837 the appropriation for each child between the ages of five and fifteen years was \$2.62, and in 1855 it was \$5.48, or an increase of one hundred and nine per cent. In 1840 the appropriation was \$3.19; in 1845, it was \$3.60; in 1850, \$4.71; and in 1855, it amounted to \$5.48 for each child in the Commonwealth between the ages of five and fifteen years. In 1837 the property of the State was equal to \$393 for each inhabitant; in 1840, to \$406; in 1850, to \$600; in 1855, it was not less than \$790, or an increase of one hundred per cent. in twenty years. It is thus seen that the increase of appropriations in this branch of expenditure has exceeded the increase of capital in the State by nine per cent. The facts already stated also show that the productive power of each individual has increased one hundred and eleven per cent. since 1837; and from the entire view presented we are able to deduce the yet more remarkable truth, that the appropriations for the education of each child, the accumulation of capital, and the annual individual productive power of our people have been promoted in corresponding ratios.

Progress in twenty years in regard to School Buildings.—In 1855 the cities and towns expended in erecting and repairing school-houses for the use of public schools the sum of \$588,213.55; while in 1837 the expenditures upon school-houses did not exceed \$80,000, thus showing the remarkable difference between the two years of over half a million of dollars. In April, 1854, the school committees appraised the public school-houses at \$4,576,457.26, and after allowing for additions, and making also reasonable deduction for depreciation, they must now possess an intrinsic value of more than five millions of dollars. This array of figures does not present a perfect idea of the nature and extent of the change that has been effected, yet it may produce the impression that less remains to be done than the facts warrant. Mr. Mann, in his Third Annual Report, says: "By what I have learned from authentic sources, and have seen in three annual circuits through all parts of the Commonwealth, respecting its three thousand school-houses, I am convinced that there is no other class of buildings within our limits, erected either for the permanent or the temporary residence of our native population, so inconvenient, so uncomfortable, so dangerous to health by their construction within, or so unsightly and repulsive in their appearance without. * * * I do not think there are more than a hundred of the three thousand school-houses in the State, erected in a style at all superior, even if equal, to that of the poorest public buildings of any other kind, in the very poorest and most sparsely populated portions of the Commonwealth. Leaving the city of Boston out of the account, it would be easy to select a hundred churches, which the parents have built for themselves, worth all the three thousand school-houses, collectively, which they have built for their children.

In 1848, Mr. Mann estimated the school-houses in the State at two millions seven hundred and fifty thousand dollars; and also that two millions two hundred thousand dollars of that sum had been raised subsequently to the Report on school-houses and school-house architecture, made by the Board of Education in 1838. From these statements we gather the opinion that the three thousand school-houses in Massachusetts in 1838 had an aggregate value of five hundred and fifty thousand dollars, or something less than \$200 each. Upon the assumption, supported by the number of schools returned, that there were four thousand school-houses in the State in 1855, their average value would be twelve hundred and fifty dollars. But however this may be, we are now

annually expending upon school-houses a sum of money equal to the entire investment twenty years ago; and within one hundred thousand dollars of the whole expenditure from 1839 to 1843 inclusive.

Proportion of Male and Female Teachers.—It is to be observed that of the whole number of teachers employed, the proportion of males is much less than it was twenty years ago, and this change has been gradual and constant during a larger part of the period. In 1837 there were 2,370 male and 3,591 female teachers, the proportion of the former being to the latter as four to six; but in 1855 there were only 2,069 males to 7,602 female teachers, the proportion being as four to fifteen. This change has arisen chiefly from two causes: First, a general and rapid increase of wages and tempting business opportunities have drawn the young men of the State into other pursuits; and secondly, there has been a growing and well grounded belief that the training of children in the primary and common district schools may be best confided to females. Hence, as a result, the services of male teachers are only required in the high schools, grammar schools, and district schools that are peculiar in their character, or peculiar in the local sentiment by which they are controlled.

Private Schools.—Since 1837 the number of academies and private schools has diminished from 854 to 771, and the number of scholars in them from 27,266 to 23,617.

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But while the influence of private schools is much less in proportion to the population of the State than it was twenty years ago, much work yet remains to be done. There are important classes who do not entertain those elevated ideas of education which will lead them to engage heartily in whatever is calculated to promote it. Such are comparatively indifferent to the system, and especially are they inclined to leave everything appertaining to the schools in the condition the least troublesome to themselves. Such assent readily to the ordinary appropriations, but they resist, or accept with reluctance, any increase in the expenditure of money and any change in modes of education. When in a town this inertness becomes a successful barrier to the movements of the more enthusiastic, the latter are sometimes induced to turn away from the public system, and provide other means for the education of their children. This is a great evil, and can be remedied in one way only. It will not do to ask the parent, anxious for the education of his children, to keep them in the public schools, when the

schools are not what they ought to be, and thus waste their time and mar their prospects in the world. Intelligent, judicious, faithful parents will secure the education of their children if possible, and it is the duty of the public to furnish such means as are fitted to qualify young men and women for the business of life. If, then, the parent asks only this, his is a reasonable request, and the public should grant it. This, however, is not always done, and the irresistible inference is, that the educational movement of the last twenty years has given to a portion of the people ideas of what a school should be, that are not answered by the opinions of others, who, in some cases, constitute a majority of the voters in a town or district. What, under such circumstances, is to be done? Approach this inert public sentiment, and, in a spirit of kindness, animate, invigorate, quicken it in the work of reform. Lead men to feel that they and theirs are interested in having an elevated and constantly improving system of public education, that shall meet the wants of the era on which the country now enters.

All should be convinced, if possible, that public schools, except for strictly professional culture, are at once more beneficial and economical. When the public school, whether it be the district, primary, grammar, or high school, is what it ought to be, it at once unites in its support the entire social, moral, political, and pecuniary power of the neighborhood or town. Now, allowing the instruction to be equal, what private institution can, under such circumstances, compete with the public school? Private or select schools do not thrive, except such as are professional in their character, or amply endowed, where the public schools are what they ought everywhere to be. And where such public schools exist, they furnish better education, within the limits occupied, than can be furnished by any private school.

In public schools, where the system of gradation exists, and transfers are made from the lower to the higher departments upon the merits and attainments of pupils only, nothing further in the matter of classification can be desired. It is practicable to put together pupils of similar attainments and powers, and whenever an individual falls behind, the class is at once relieved of his presence, and he drops down until he finds his level. In private schools little or nothing of this kind can be done. Candidates are not subjected to a thorough examination, and a school of fifty pupils will usually furnish scholars suited to two if not to three of the great departments of our public system. In the public schools, position

is the result of merit ; hence, every pupil is put upon his own resources ; while under the private system it is possible for idleness and mediocrity to maintain a respectable position in the estimation of the world.

And private schools which do the work that ought to be done in the public schools, increase the cost of education. The latter, in every instance, are to be maintained, whether all the children are taught in them or not. It is apparent that a town of two, four, or six thousand inhabitants can educate its children cheaper when it employs but one system, than it can when it employs two. This, then, may be assumed as a general truth : That the existence of private schools to do the work ordinarily done in the public schools, is strong evidence that the latter are not what they ought to be. I say *strong* evidence, for it is not conclusive. There are persons who believe that the moral and intellectual welfare of their children will be promoted by the tuition and society found in private or select schools. It may be so occasionally, but not generally. One objection to private schools is that they contain the exceptional characters of childhood and youth. They do not present the world as it actually is. Hence, the graduate is not fitted for the business of life, because he is as yet in a great degree ignorant of the social elements that surround him.

The power of the parent to seclude his child from the world is limited by the term of the child's minority. When that is passed, he enters upon life, and is at once, without any practical culture, brought into contact with the characters found in the public schools ; for, labor as men may, the public schools will give character to society, and determine what the associations of every individual are to be. In this age, the world is neither reformed, improved, nor governed by the education of the cloister. With this view of schools, and education, and life, two practical errors are to be combated, and, if possible, removed. First, the error that resists appropriations for convenient school-houses, suitable apparatus, and competent teachers, and which is, in itself, both the fact and the evidence of a public sentiment, tempered to furnish an education suited to the last generation, rather than to this ; and secondly, we are to guard against the error, less general, but equally pernicious, that induces men to abandon the public system, because it does not, in all respects, meet their own ideas. This argument does not, however, tend to show that private schools are unnecessary. Far from it. Their necessity and importance are conceded ;

but the claim is that the public system can furnish the education needed by all citizens, without reference to their calling; that the education given is both more thorough and more economical; and, therefore, it is a duty to make it universal, through the public schools.—*Ext. from the Report of Geo. S. Boutwell, Sec'y of the Board of Education, Mass.*

MANAGEMENT OF BOYS.

How greatly do parents and preceptors err in mistaking for mischief, or wanton idleness, all the little manœuvres of young persons, which are frequently practical inquiries to confirm or refute doubts passing in their minds! When the aunt of James Watt reproved the boy for his idleness, and desired him to take a book, or employ himself to some purpose usefully, and not be taking off the lid of the kettle and putting it on again, and holding now a cup and now a silver spoon over the steam, how little was she aware that he was investigating a problem which was to lead to the greatest of human inventions!

It has been said that we are indebted for the important invention in the steam engine, termed *hand-gear*, by which its valves or cocks are worked by the machine itself, to an *idle* boy of the name of Humphrey Potter, who, being employed to stop and open a valve, saw that he could save himself the trouble of attending and watching it, by fixing a plug upon a part of the machine which came to the place at the proper times, in consequence of the general movement. If this anecdote be true, what does it prove? That Humphrey Potter might be very *idle*, but that he was, at the same time, very *ingenious*. It was a contrivance, not the result of mere accident, but of some observation and successful experiment.

The father of Eli Whitney, on his return from a journey which had necessarily compelled him to absent himself from home for several days, inquired, as was his usual custom, into the occupations of his sons during his absence. He received a good account of all of them except Eli, who, the housekeeper reluctantly confessed, had been engaged in making a fiddle. "Alas!" says the father, with a sigh and ominous shake of the head, "I fear that Eli

will have some day to take his portion out in fiddles." To have anything to do about a fiddle, betokened, the father thought, a tendency to engage in mere trifles. How little aware was the father that this simple occupation, far from being a mere fiddle-faddle, was the dawning forth of an inventive genius to be ranked among the most effective and useful in respect to arts and manufactures.

It is related of Chantry, the celebrated sculptor, that, when a boy, he was observed, by a gentleman of Sheffield, very attentively engaged in cutting a stick with a penknife. He asked the lad what he was doing, and with great simplicity but courtesy he replied, "I am cutting old Fox's head." (Fox was the schoolmaster of the village.) On this the gentleman asked to see what he had done, and pronounced the likeness excellent, presenting the youth with a sixpence. How many would have at once characterized the occupation of the boy as a mischievous or idle one; losing sight, for the time, of that lesson which every parent should know how to put into use, "Never despise small beginnings."

Of Edward Malbone, the painter, it is said, the "intervals of his school hours were filled by indefatigable industry in making experiments, and endeavoring to make discoveries." One of his greatest delights was found in *blowing bubbles*, for the pleasure of admiring the fine colors they displayed. Thus it appears that even the soap-bubble amusement, idle as some think it to be, may have not a little to do towards leading the young artistic mind to discriminate nicely between delicate shades of color.

The first panels on which William Etty, an English painter, drew, were the boards of his father's *shop-floor*; and his first crayon a farthing's worth of *white chalk*—a substance considered now-a-days almost invariably ominous of mischief-doing in the hands of a boy, especially on the opening day of the month of April. Now what does the mother of "little Willie" do, on discovering the nicely swept floor, *disfigured* with chalk lines? Of course she scolds, and calls him a mischievous little fellow? No, this is not the course the sensible mother pursues. In an autobiographical letter addressed to a relative, Etty, speaking of this circumstance in his youthful life, says, "My pleasure amounted to ecstasy, when my mother promised me next morning, if I were a good boy, I should use some colors mixed with gum-water. I was so pleased I could scarcely sleep."

The family tradition says of Edward Bird, that he would, at three or four years of age, stand on a stool, chalk outlines on the

furniture, and say, with childish glee, "Well done, little Neddy Bird." Even at the dawn he would be up to draw figures upon the walls, which he called French and English soldiers. No doubt the question often engaged the attention of the parents, as to how little Neddy should be broken of the habit of sketching so much on almost everything about the house. The father finding, however, that his love of drawing and sketching was incurable, at length *wisely* ceased to counteract his artistic tendency, and, beginning to grow anxious to turn it to some account, finally apprenticed him to a maker of tea-trays, from whose employ, as every one knows, he advanced into the ranks of acknowledged genius.

When young West first began to display skill in drawing, and learned from the roaming Indians the method of preparing colors, he was at a loss to conceive how to lay these colors skillfully on. A neighbor informed him that this was done with brushes formed of camel's hair; there were no camels in America, and he had recourse to the cat, from whose back and tail he supplied his wants. The cat was a favorite, and the altered condition of her fur was imputed to disease, till the boy's confession explained the cause, much to the amusement of his father, who rebuked him, *not rashly*, but as becometh a *wise* parent, more in *affection* than in *anger*. To rebuke such an act wisely, required on the part of the parent a discrimination sufficiently clear to discern that *mischief-doing* had nothing to do in the affair. It was of no small importance that the correction employed should be adapted to the circumstances of the case. So also the mother of West, when she was sent to seek her son by the anxious inquiries of the schoolmaster in regard to absence for several days from school, did not, on finding him with his box and paints laboring secretly in the garret, vent forth her anger in a passionate way, as though the child were engaged in a "mere foolish piece of business."

Thus we see the necessity of great discrimination on the part of a parent in the correction of a child. Children do not always necessarily engage in doing things in a sort of perfunctory manner, merely performing them for the sole purpose of getting through, careless whether they are done well or not. Children need not always necessarily act out their manœuvres in a roguish manner, merely busying their brain for the purpose of working out some means to practice a trick. Chalk does not appear to be used invariably for such purposes as raising laughter and performing mischievous acts. Even at the sight of charcoal, so difficult to toler-

ate, it is not allowable for the parent to disuse discretion, though mischievousness may seem to make use of this exceedingly smutty substance as one peculiarly suited to answer its purposes. It is said that our Copley, at some seven or eight years old, on being observed to absent himself from the family for several hours at a time, was at length traced to a lonely room, on whose bare wall he had drawn in *charcoal* a group of martial figures engaged in some nameless adventure. The artistic tendency in such a case, needs a treatment far different from that which would attribute it to a love of mere sportive trick-practicing. The manœuvres of a boy should be thoroughly studied as to their real nature before recourse is had to rod correction. Rashness on the part of the parent or teacher is never excusable. It should be remembered that in the plays and pursuits of the boy the future man is sometimes seen, and therefore it becomes of no little importance to know how the amusements and games of children may be improved for directing their inclinations to employments in which they may hereafter excel.—*Boston Transcript*.

MEANS OF CULTIVATING A LITERARY TASTE.

Having concluded to spend the summer vacation at a five weeks' Teachers' Institute, in our sister State of Ohio, we have already been favored with many valuable hints on the manner of teaching, and among the rest, we have listened to the reading of an essay on the above subject. It so nearly meets our views that, with the writer's consent, we make an extract for the *Journal*. As our space is limited, we must condense a little, but will retain the words of the writer as nearly as possible :

"We are a reading people; and writers are as numerous as forest leaves. * * * * After our school days are over, general reading becomes a principal source of mental improvement; therefore it is important that we should know *what* to select and *how* to read. But what is the present state of the public mind in this respect? How many adults, intelligent, too, in some sense, who can not name a dozen standard authors, with the time they flourished, and the nation to which they belonged. If it be true that our literary taste, as well as well as character, is formed in youth, how can teachers best succeed in so moulding the mental habits of

pupils, that they may not waste precious hours, all through life, in the perusal of worthless books? How train them to discern what is valuable and what is not—to know *why* one book should be preferred to another?

“To commence, we would assign to a class, in addition to the lesson they are to read, an account of some popular standard author—say Longfellow or Bryant. Let each pupil prepare a brief biographical sketch, drawing materials from any and all available sources. You have no idea, if you never tried it, of the number of interesting facts that will thus be accumulated. For example, if the lesson be on Bryant, one will tell you where he was born and when, and the profession of his immediate ancestors; another that he published a volume of poems at the early age of fourteen; another that he practiced law for some time, and afterwards traveled through Europe, &c. The statement of these facts will intensely interest the class, and they will wish to learn more of him. You might now tell the class to read all the articles in their book which were written by Bryant, and request each one to select the paragraph he or she thinks the best. Here you will test the inclinations of the different minds.

“At the next recitation have the selected passages read, and ask each pupil the *reason* for his choice. Compare and analyze each sentence, and bring out beauties and faults; thus you will begin to form taste. Our mind may be different from others, but we have found more delight in conducting such exercises than any other within the range of the profession. It is a joy to see their minds awake to the appreciation of the beautiful and true. Instead of drawling listlessly through the thirty-two stanzas of Gray’s *Elegy*, without acquiring two definite ideas, they will soon learn to drink in the exhaustless richness of the verse. Every line will fill the mind with vivid pictures. When they read—

“Now fades the glimmering landscape on the sight,”

the imagination sees the hills and valleys reposing in the mellow twilight, and the pleasure felt is increased by reading—

“And all the air a solemn stillness holds,
Save where the beetle wheels his droning flight,
And drowsy tinklings lull the distant folds.”

“Solemn stillness”—they can almost feel its magic charm, and hear those “drowsy tinklings.” It were worth a day of toil to read these four lines with a full appreciation.

"Having studied the passages selected from one author, take another, and investigate his compositions in the same manner. Then compare the two, and note the points of agreement and difference in style. See which excels in imagery or in any other respect. Soon the pupil will learn to observe not only the style but the substance of what he reads, and will discover who are the writers that *think*.

"After this there will be a definite object in their reading, vain and aimless wanderings from one book to another will be avoided, pure taste will have a chance of developement, and useful books will be preferred to trash. Thus will true scholars be made—thus real authors."

The above extracts exhibit the method one teacher takes to accomplish the given object; each one can change or modify measures to suit himself; but there is surely something for most of us to do in this respect. Let us compare views and obtain information on this important subject.

C. M. B.

WESTWARD MOVEMENT OF THE CENTER OF POPULATION,

AND OF INDUSTRIAL POWER IN NORTH AMERICA.

In the rapidly developing greatness of North America, it is interesting to look to the future, and speculate on the most probable points of centralization of its commercial and social power. I leave out the political element, because, in the long run, it will not be very potential, and will wait upon industrial developments. I also omit Mexico, so poor, and so disconnected in her relations to the great body of the continent.

Including with our nation, as forming an important part of its commercial community, the Canadas, and contiguous provinces, the center of population, white and black, is a little west of Pittsburg. The movement of this center is north of west, about in the direction of Chicago. The center of productive power can not be ascertained with any degree of precision. We know it must be a considerable distance east and north of the center of population. That center, too, is on its grand march westward. Both, in their regular progress, will reach Lake Michigan. The center of industrial

power will touch Lake Erie, and possibly, but not probably, the center of population may move so far northward as to reach Lake Erie also. Their tendency will be to come together; but a considerable time will be required to bring them into near proximity. Will the movement of these centers be arrested before they reach Lake Michigan? I think no one expects it to stop eastward of that lake; few will claim that it will go far beyond it. Is it not, then, as certain as anything in the future can be, that the central power of the continent will move to, and become permanent on, the border of the great lakes? Around these pure waters will gather the densest population, and on their borders will grow up the best towns and cities. As the centers of population and wealth approach and pass Cleveland, that city should swell to large size. Toledo will be still nearer the lines of their movement, and should be more favorably affected by them, as the aggregate power of the continent will, by that time, be greatly increased. As these lines move westward towards Chicago, the influence of their position will be divided between that city and Toledo, distributing benefits according to the degree of proximity.

If we had no foreign commerce, and all other circumstances were equal, the greatest cities would grow up along the line of the central industrial power, in its westward progress, each new city becoming greater than its predecessor, by the amount of power accumulated on the continent, for concentration from point to point of its progress. But as there are points from one resting-place to another, possessing greatly superior advantages for commerce over all others, and near enough the center line of industrial power to appropriate the commerce which it offers, to these points we must look for our future great cities. To become chief of these, there must be united in them the best facilities for transport, by water and by land. It is too plain to need proof, that these positions are occupied by Cleveland, Toledo, and Chicago.

But we have a foreign commerce beyond the continent of North America, by means of the Atlantic Ocean, bearing the proportion, we will allow, of one to twenty of the domestic commerce within the continent. This proportion will seem small to persons who have not directed particular attention to the subject. It is, nevertheless, within the truth. The proof of this is difficult, only because we can not get the figures that represent the numberless exchanges of equivalents among each other, in such a community as ours.

If we suppose ten of the twenty-nine millions of our North American community to earn, on an average, \$1.25 per day, 312 days in the year, it will make an aggregate of nearly four thousand millions of dollars. If we divide the yearly profits of industry equally between capital and labor, the proportion of labor would be but \$1.25 per day, for five millions of the twenty-nine millions. The average earnings of the twenty-nine millions, men, women, and children, to produce two thousand millions yearly, would be 22 cents a day, for 312 working days. This is rather under than over the true amount; for it would furnish less than \$70 each for yearly support, without allowing anything for accumulation.

Of the four thousand millions of yearly production, we can not suppose that more than one thousand millions is consumed by the producers, without being made the subject of exchange. This will leave three thousand millions as the subjects of commerce, internal and external. Of this, all must be set down for internal commerce, inasmuch as most of that which enters the channel of external commerce, first passes through several hands, between the producer and exporter. Foreign commerce represents but one transaction. The export is sold, and the import is bought with the means the export furnishes. Not so with domestic commerce. Most of the products which are its subjects, are bought and sold many times between the producer and ultimate consumer. Let us state a case:—

I purchase a pair of boots from a boot dealer in Toledo. He has purchased them from a wholesale dealer in New York, who has bought them of the manufacturer in Newark. The manufacturer has bought the chief material of a leather dealer in New York, who has made the purchases which fill his large establishment from small dealers in hides. These have received their supply from butchers. The butchers have bought of the drovers, and the drovers of the farmers. If the boots purchased are of French manufacture, they have been the subject of one transaction represented in foreign trade, to-wit: their purchase in Paris by the American importer; whereas, they are the subject of several transactions in our domestic trade. The importer sells them to the jobber in New York; the jobber sells them to the Toledo dealer, who sells them to me.

It can scarcely admit of a doubt, that the domestic commerce of North America bears a proportion as large as twenty to one of its foreign commerce. Has internal commerce a tendency to con-

concentrate in few points, like foreign commerce? Is its tendency to concentration less than that of foreign commerce? No difference, in this respect, can be perceived. All commerce develops that law of its nature, to the extent of its means. Foreign commerce concentrates chiefly at those ports where it meets the greatest internal commerce. The domestic commerce being the great body, draws to it the smaller body of foreign commerce. New York, by her canals, her railroads, and her superior position for coastwise navigation, has drawn to herself most of our foreign commerce, because she has become the most convenient point for the concentration of our domestic trade. It is absurd to suppose she can always, or even for half a century, remain the *best* point for the concentration of domestic trade; and, as the foreign commerce will every year bear a less and less proportion to the domestic commerce, it can hardly be doubted that, before the end of one century from this time, the great center of commerce of all kinds, for North America, will be on a lake harbor. Supposing the center of population (now west of Pittsburg) shall average a yearly movement westward, for the next fifty years, of twenty miles; this would carry it one thousand miles northwestward from Pittsburg, and some five hundred or more miles beyond the central point of the natural resources of the country. It would pass Cleveland in five years, and Toledo in eleven years, reaching Chicago, or some point south of it, in less than twenty-five years. The geographical center of industrial power is probably now in north-eastern Pennsylvania, having but recently left the city of New York, where it partially now for a time remains. This center will move at a somewhat slower rate than the center of population. Supposing its movement to be fifteen miles a year, it will reach Cleveland in twenty years, Toledo in twenty-seven years, and Chicago in forty-five years. If ten years be the measure of the annual movement northwestward of the industrial central point of the continent, Cleveland would be reached in thirty years, Toledo in forty, and Chicago in sixty-three years. It is well known, that the rate at which the center of population in the United States is now moving westward, is over fifteen miles a year, and that it is moving with an accelerated speed. It is obvious that the center of population, and the center of industrial power, now widely separated, by the nature of the country between New York and Cleveland, by the superiority in productive power of the old Northern and Middle States, over the new States of the Northwest; and still more, by

the inferiority of industrial power of the plantation States, compared with the region lying north of them, will have a constant tendency to approximate, but can never become identical, so long as the inferior African race forms a large portion of the population of the great southern section of our Union. The constant tendency of the center of industrial power will be northward, as well as westward. This will be determined by the superiority of natural resources of the Northwest, over the Southwestern section, by the use of a far greater proportion of machine labor, in substitution for muscular labor, in the northern region, and also by the superior muscular and mental power of the inhabitants of the colder climate. To these might be added the immense advantage of a vastly greater accumulated industrial power, in every branch of industry, and the tendency of the superabundant capital of the Old world to flow into the free States, and the country north of them.

In the view of the subject which has been taken here, it will be seen that the trade of the British Provinces north of us has been considered a portion of our domestic trade, and that Mexico and California have been left out of our calculation. These may be allowed to balance each other. But, together or apart, they will not be of sufficient importance to our continental commerce, to vary materially the results of its future for the next fifty years, as developed in this paper.

At their present rate of increase, the United States and the Canadas, fifty years from this time, will contain over one hundred and twenty millions of people. If we suppose it to be one hundred and five millions, and that these shall be distributed so that the Pacific States shall have ten millions, and the Atlantic border twenty-five millions, there will be left for the great interior plain, seventy millions. These seventy millions will have twenty times as much commercial intercourse with each other, as with all the world beside. It is obvious, then, that there must be built up in their midst the great city of the continent; and not only so, but that they will sustain several cities greater than those which can be sustained on the ocean border.

This is the era of great cities. London has nearly trebled in numbers and business since the commencement of the current century. The augmentation of her population in that

time, has been a million and a half. This increase is equal to the whole population of New York and Philadelphia; and yet it is probable that New York will be as populous as London, in about fifty years. A liberal but not improbable estimate of the period of duplication of the numbers of these great cities would be, for London, thirty years, and for New York, fifteen years. At this rate, London will have four millions and seven hundred thousand, and New York three millions four hundred thousand, at the end of thirty years. At the end of the third duplication of New York—that is, in forty-five years, she will have become more populous than London, and number nearly seven millions. This is beyond belief, but it shows the probability of New York overtaking London in about fifty years.

A similar comparison of New York and the leading interior city—Chicago—will show a like result in favor of Chicago. The census returns show the average period of duplication to be fifteen years for New York, and less than four years for Chicago. Suppose that of New York for the future should be sixteen years, and that of Chicago eight years, and that New York now has, with her suburbs, nine hundred thousand, and Chicago one hundred thousand people. In three duplications, New York would contain six millions two hundred thousand, and Chicago, in six duplications, occupying the same length of time, would have six millions four hundred thousand. It is not asserted, as probable, that either city will be swelled to such an extraordinary size in forty-eight years, if ever; but it is more than probable that the leading interior city will be greater than New York fifty years from this time.

A few words as to the estimation in which such anticipations are held. The general mind is faithless of what goes much beyond its own experience. It refuses to receive, or it receives with distrust, conclusions, however strongly sustained by facts and fair deductions, which go much beyond its ordinary range of thought. It is especially skeptical and intolerant towards the avowal of opinions, however well founded, which are sanguine of great future changes. It does not comprehend them, and therefore refuses to believe; but it sometimes goes further, and, without examination, scornfully rejects. To seek for the truth, is the proper object of those who, from the past and present, undertake to say what will be in

the future, and when the truth is found, to express it with as little reference to what will be thought of it, as if putting forth the solution of a mathematical problem.

If it were asked, whose anticipations of what has been done to advance civilization, for the past fifty years, have come nearest the truth—those of the sanguine and hopeful, or those of the cautious and fearful—must it not be answered that no one of the former class had been sanguine and hopeful enough to anticipate the full measure of human progress, since the opening of the present century? May it not be the most sanguine and hopeful only, who, in anticipation, can attain a due estimation of the measure of future change and improvement, in the grand march of society and civilization westward over our continent?—*Hunt's Merchants' Magazine*.

DOES THE MISSISSIPPI RUN UP HILL?—That's the question. Dr. Boynton takes the affirmative, and Horace Mann the negative. Who shall decide when doctors disagree? It is a fact that the figure of the earth is an oblate spheroid, having its equatorial diameter more than 26 miles longer than its polar diameter, and consequently the equatorial regions are some 13 miles further from the earth's center than the poles are. If the earth were at rest, the water in the tropical regions would flow with great rapidity towards the poles, until the equilibrium, as far as water is concerned, would be restored. The Mississippi would flow from its mouth to its source, the former being over two miles further from the center of the earth than the latter. It is therefore evident that the water in this river, as it now flows, rises or recedes from the earth's center between two and three miles, in passing from its source to the Gulf of Mexico.

"But how can water run up hill?" asks Horace Mann and others. For the same reason that water on a grindstone in motion will mount the center ridge instead of running off at the sides. The revolution of the earth round its axis gives all bodies on its surface, especially water, a tendency to the equator; and this tendency is sufficient to counterbalance the rise in the surface in the same direction; in fact the one is the cause of the other. Water is therefore free to flow in any direction, which inequalities on the surface, thus balanced, may occasion. If the daily rotation of the earth becomes slower, the tendency of bodies to the equator would diminish, and the water would flow toward the poles, until another surface equilibrium were established. If the rotation become more rapid, the water would rush toward the equator, till the equilibrium was restored. These opposite forces, the centrifugal and centripetal, will always balance each other.

How Mr. Mann could be puzzled about so clear a matter, is singular. One would imagine that the mind which could originate the idea of marrying a man to twenty fine ladies of the modern school without subjecting him to a charge of bigamy, would be able to comprehend a very simple problem in natural philosophy.—*Quincy (Ill.) Republican*.

SCIENCE AND THE INDUSTRIAL ARTS.

Sir David Brewster, at a meeting of the British Association, stated this interesting fact: that if we smear very slightly with soap the surface of a piece of glass, whether artificially polished or fused, and then clean it perfectly with a piece of chamois leather, the surface, when breathed upon, will exhibit in the most brilliant manner all the colors of thin plates. If we breathe through a tube, the colors will be arranged in rings, the outermost of which is black, corresponding to the centre of the system of the rings formed between a convex and a plane surface. On repeating this experiment on the surface of other bodies, Sir David found that there were several on whose surface no colors were produced. Quartz exhibited the colors like glass, but calcareous spar and several other minerals did not. In explaining this phenomenon, it was stated that the particles of the soap, which are dissolved by the breath, must either enter the pores of the bodies or form a strongly adhering film on their surface.

A Belgian company are now extensively engaged in the manufacture of zinc for the sheathing of vessels. In a pamphlet issued, they present testimonials of the use of zinc sheathing in various ships, for eight, nine, and even twelve years. The average duration of a zinc suit is, however, fixed at six years. The zinc is used in thicker sheets than either copper or brass, and is said not to oxydize or corrode, as copper or brass, by immersion in sea-water.

Mr. Hepburn has argued before the Scottish Society of Arts in favor of the use of balls instead of points for the termination of lightning conductors. He stated that he had been led to doubt the efficacy of the conductors usually adopted, terminating in points, which was contrary to the plan found to be necessary in the management of artificial electricity, in which, while the fluid is gradually collected from the excited cylinder by a row of pointed wires attached to the prime conductor, its transmission from the conductor to the battery and the discharge of the battery itself, are always effected by balls. It thus appears that for the absorption and transmission of an accumulated mass of electricity, an extended surface is required; and as in the protection of buildings it is necessary to provide for the instantaneous absorption of a concentrated mass of electricity darting through the air in the form of a flash or ball, Mr. Hepburn conceived that the conductor ought to terminate in one or more pear-shaped balls, having a surface sufficient to absorb at least as much of the fluid as the descending rod is capable of carrying to the earth. It remains to be determined whether a large hollow ball or a smaller solid one is preferable.—*Selected.*

The REV. DR. EDWARDS, President of the College at South Hanover, has been appointed to the West Arch street Church, Philadelphia.

There is to be an Institute of one week in Tippecanoe County, commencing the last Monday in August.

MATHEMATICAL DEPARTMENT.

W. D. HENKLE, Editor.

SOLUTION OF No. 41.—BY W. DOWNS.

The conditions of the problem are expressed by the equations,

$$x^2=y \text{ and } y^2=x$$

By substituting x^2 for y in the second eq., I get $x^4=x$ or $x^3=1$. Also substituting y^2 for x in the first eq., I get $y^4=y$ or $y^3=1$. Hence the conditions of the problem are expressed by $x^3=1$ and $y^3=1$. These equations

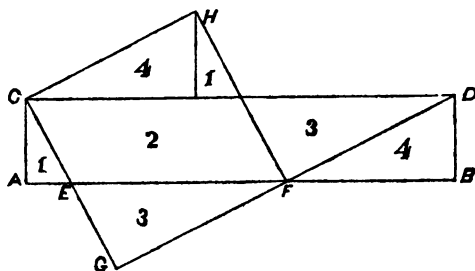
give $x=1, -\frac{1}{2}+\frac{1}{2}\sqrt{-3}$, or $-\frac{1}{2}-\frac{1}{2}\sqrt{-3}$

and $y=1, -\frac{1}{2}+\frac{1}{2}\sqrt{-3}$, or $-\frac{1}{2}-\frac{1}{2}\sqrt{-3}$

Since the quantities are to be *different*, we must take $-\frac{1}{2}+\frac{1}{2}\sqrt{-3}$ and $-\frac{1}{2}-\frac{1}{2}\sqrt{-3}$ for those required.

[This problem was also solved by *H. N. Robinson, Jacob Staff, Judge Clark, Charles Atherton, and M. C. Stevens.*]

SOLUTION OF No. 42.—BY THE EDITOR.



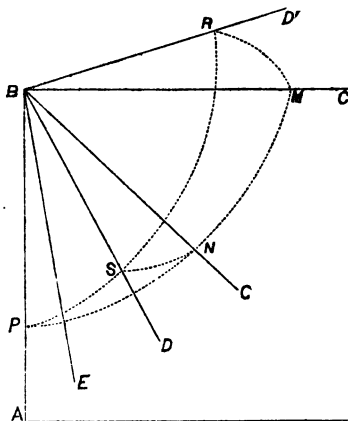
Let the rectangle C B represent the board, C A being =2 and A B being =10. The area of the rectangle being =20 the side of a square which is equal to it is the square root of 20 or $2\sqrt{5}$. Hence if we get a line = $\sqrt{5}$ and double it we shall have the side of the required square. If we take A E=1 then C E= $\sqrt{5}$, and if we produce C E to G, making E G=C E, then C G= $2\sqrt{5}$, the side of the required square. Joining G D we have the two similar triangles C D G and E F G, which give E F=5 or half of C D and G F=F D. Since F B=4 and B D=2, F D must = $2\sqrt{5}$, hence G F= $2\sqrt{5}$. The square G H described on G F or

its equal $G O$ is the required square. It is now very easy to see that the pieces of the board numbered 1, 2, 3, 4 are exactly equal to the pieces of the square which have the same numbers.

[This problem was also solved by *Charles Atherton, M. C. Stevens, Judge Clark, and J. K. Cravens.*]

SOLUTION OF NO. 43.—BY CHARLES ATHERTON.

I have no doubt that the answer to this problem in Olmsted's *Philosophy*, is incorrect. The source of the error may be shown as follows:



Let $A B$ represent the axis of the steeple, which is assumed to be a cone or pyramid; $B C$, $B D$, and $B E$ the three ropes. As the angles $E B D$ and $D B C$ are the same, we shall take notice only of the lines $B D$ and $B C$, $B D$ being the middle one of the three. Let $B D'$ and $B C'$ represent the same ropes acting in a plane perpendicular to the axis of the steeple. The line $B D'$ is that in which the power of 500 lbs.

would act to overturn the steeple. Olmsted's error arises from considering the angle $D B C = D' B C'$. It is true that $B C$ is in the same vertical plane with $B C'$; also $B D$ with $B D'$. But $B C'$ and $B D'$ are at right angles with $A B$, the common section of those planes, and $B C$ and $B D$ form oblique angles with the same line. If $B C$ and $B D$ were drawn in their respective planes indefinitely near to $A B$, it is evident that the angles between them would be very small. As they recede from that position and approach the perpendiculars $B C'$ and $B D'$, this angle continually increases, till, in the position $B C'$ and $B D'$ they form the greatest angle possible. To find the angle $C' B D'$: from the point B with any radius, describe a circular arc in the plane $A B C'$, cutting $B C'$ in M , $B C$ in N , and $A B$ in P . From the same point, with the same radius, in the plane $A B D'$, describe an arc, cutting $B D'$ in R , $B D$ in S , and $A B$ in P , the same point. Let $R M$ and $S N$ be respectively joined by arcs of great circles, B being the centre. The arc $R M$ will measure the angle $D' B C'$, also the spherical angle $R P M$. In the spherical triangle $N P S$ we have all the sides given, viz.: $N P = 40^\circ$, $S P = 40^\circ$, and $N S = 30^\circ$, to find the angle $P = 47^\circ 29' 16'' =$ the angle $C' B D'$.

Assume the force acting in the direction B D'=1, then rad.: cos. D' B C' 47° 29' 16'' :: 1 : .675747 = effective force acting in the direction B C'. Hence 1+.675747+.675747=2.351494, sum of the three forces acting in the plane D' B C'.

Again: 2.351494 :: 500 : $\frac{500}{2.351494}$ = middle force equivalent to 500 for the three.

Then as cos. 50° : rad. :: $\frac{500}{2.351494}$ (=middle force acting in the direction B D) : 330.79 = force required.

PROBLEM No. 49.—By M. C STEVENS.

The length of the three lines drawn from a given point to three angles of a square, are 35, 46, and 50 yards: to determine a side of the square. (*From Lewis's Trigonometry, p. 81.*)

PROBLEM No. 50.—By J. B. SANDERS.

Divide a trapezoid into two equal parts by a line parallel to the parallel sides.

PROBLEM No 51.—By AGRICOLA.

Required the greatest possible number of hills of corn that can be planted on a square acre, the hills to occupy only a mathematical point, and no two hills to be less than $3\frac{1}{2}$ feet from each other.

EDITORIAL MISCELLANY.

NOTES BY THE WAY.

Napoleon said that "France needed educated Mothers," and, like a sensible man, he set his energies at work to provide institutions of learning, that the object might be accomplished. He knew that if *Mothers* were educated, there would be intellectual, energetic *men*, just the element the State needed to develop its power, elevate its character, and secure its glory and perpetuity.

The Constitution of our State acknowledges that "Virtue and intelligence are indispensable to the happiness and prosperity of a free people," yet what are the facts staring us in the face, respecting our facilities for making a free and intelligent people? We have the highest per cent. of ignorance of any of the free States; 70,540 free white adult persons in 1850 could not read nor write. In the last five years not one-half of our children and youth have attended any school; and a large share of those

who attend what are *called* schools, hardly take the first step towards intellectual and moral culture.

A large number of our towns, containing from 1,000 to 6,000 inhabitants, have no schools except such as are made by transient wanderers, out of employment, and incapable of making a livelihood at other pursuits; and these schools are kept in damp, dark basements, useless garrets, or rented rooms that find no other occupants. In most of these schools, there is not taught correctly the first fundamental principle of science, or given the first lesson of morals. Parents rarely ever darken the doors where their children congregate. School Trustees feel satisfied when they have paid the school-keeper, and no bones are broken. And these wonderful *Institutions*, furnished by the munificence of the State, last from 40 to 60 days each year; and this is called our "Free School System." In such institutions are found the inhabitants (to be) of the next generation—the fathers and mothers; the jurymen and mechanics; the demagogue and the dupe. Whole sections or townships have had no more than 30 or 60 days free school during the last four years. What is done with the money? A large number of large boys and girls in those sections can not read the Bible or a newspaper.

Is it a matter of wonder that Indiana is so fertile a field for ignorant, unprincipled demagogues? That the cause of free whiskey is so popular with them? That the man is, in many districts, most sure to be elected who can tell the most lies, and spend the most for whiskey? And when the cause of humanity, human elevation, free schools, is raised and urged, the whole pack yell out in one grand, grunting chorus, Tax! Tax! Tax!! "The people won't bear it!" "Oh the times, oh the manners!"

Is this the basis on which our free institutions are to rest? And will such elements, in a free government, secure its highest good and its prosperity? Nay, verily! or else Jefferson was greatly mistaken when he said, "an ignorant people can never long be free."

Such is the element of our society now, that but few laws can be enacted that tend to improve society, elevate the moral character, or improve the intellect of our people; and those few are immediately declared *unconstitutional*. If it be a fact that all laws that tend to promote morality, sobriety, intellectual culture, and human happiness, are unconstitutional in Indiana, then is the ignorance of the people, as represented in the convention that framed the Constitution, most wofully exhibited. If such laws are not unconstitutional, then is the corruption or ignorance of our judiciary an intolerable curse upon us. In either case, there is a horn to this dilemma that stands out in disgraceful prominence.

The question is often asked, is there no remedy? Must this state of things continue to grow worse, and all its direful consequences to follow? That will depend upon the action of the honest, intelligent portion of our people. If they combine their influence, and concentrate their energy in the right direction, irrespective of party or demagogue leaders, and determine to pursue only the right until the object is attained, we can, ere

five more years shall roll around, have good school laws. We can have facilities for educating well every child in our State. We can have every township dotted over with school-houses, ample, well furnished, and beautiful. We could have high-minded, intelligent, noble men for public officers, instead of unprincipled demagogues and intellectual cripples.

Many persons are exceedingly zealous for party, feeling confident that the State, and all its interests, will be subserved if *their* party succeed in having the ascendancy. There is no safety in any party if the people are ignorant, incapable of understanding their interests and the true policy of Republican Governments. The principle of universal suffrage is based on the supposition that *every* man is well informed in civil polity, and generally intelligent. It has been said, that "he that sends an uneducated child into the world, is worse than he that lets loose a wild beast;" he can be of but little use, and is a dangerous element in society. If those teachers occupying prominent positions awake to their own true interest, as well as the interest of the cause of humanity, and put forth commendable and efficient efforts, they will see hosts of good men and true, flocking to their ranks, eager to aid forward the cause of general education. There are scores of men, acting as teachers in our State, that rarely "lift a finger" or make a move towards reforming public sentiment. "Good souls!" they think the world owes them a living, and that wisdom will die with them. Why need they get excited over the 200,000 youth in our broad State who rarely or never enter any school-room, and these soon to be citizens, empowered with responsibilities which they will be poorly able to sustain? In one city of Indiana, of 8,000 inhabitants, there are 110 grog shops, and there have been no free schools in that city during the last three years, and rarely any private schools of much value. During last winter there was a regular organized gang of "boy thieves," from the different grades of society, who operated successfully there. Yet the Mayor, and a considerable share of the Council, and a majority of the people, are opposed to free schools.

"Abit sic gloria mundi."

J. H.

MATHEMATICAL KNOWLEDGE.

There are persons so deeply imbued with the beauties and humanities of literature, that they are disposed to underrate the value of mathematical knowledge; and there are those who are so impressed with the importance and superiority of the exact sciences, that they are apt to undervalue the influence that is exerted upon mankind by great literary productions. It is our purpose, in this article, to show that the mathematician fills an important position in the world's progress. A prize of \$500 was offered this year to the student of Harvard University, who should be decided by the Corporation to have attained the greatest skill in mathematics. This prize was offered by Uriah A. Boyden, of Boston. Mr. Boyden must be a man who is fully convinced of the value of mathematical knowledge, or

he would not have offered such a prize. A circumstance which occurred last year was, no doubt, the reason that Mr. Boyden conceived the idea of making such an offer. He contracted with the company which owns the Atlantic Cotton Mills, at Lawrence, to make a turbine water-wheel which should save or "utilize" 76 per cent. of the water power. The conditions of the contract were, that if he did not succeed in saving 76 per cent., he should receive nothing, but if he did, he was to receive \$2,000, and also \$350 for every one per cent. above 76 per cent. Mr. Boyden went to work, and, after spending \$5,000 in the mathematical calculations, produced a wheel which, he claimed, would save 96 per cent. The company, not being willing to admit the justice of this unprecedented claim, refused to allow it. The case came before the Supreme Court of Massachusetts. The Court, however, felt its inability to decide the case, and, accordingly, referred the matter to Judge Joel Parker, of Cambridge, Benjamin Peirce, Professor of Mathematics in Harvard University, and James B. Francis, of Lowell, agent of the united companies of Lowell, in the management of the common water power. It will be seen that every element necessary to the correct decision of the case, namely, the law of the case, a practical acquaintance with hydraulics, and mathematical knowledge, was provided for in this selection of men. Prof. Peirce, perhaps the ablest Geometer in America, after a long and thorough investigation, gave his decision that Mr. Boyden's claim was correct. Accordingly the referees awarded to Mr. Boyden \$18,700. It is said that Mr. Boyden had previously constructed turbine wheels that "utilized" 89 and 90 per cent. The wheel that saved 96 per cent. was 104 $\frac{1}{4}$ inches in diameter.

We consider this circumstance as a proof that the general spread of critical mathematical knowledge is very desirable. About one-tenth of this journal is devoted to the increase and diffusion of mathematical knowledge, and many readers of the *Journal*, no doubt, turn first to the Mathematical Department. It may be that this means of extending mathematical knowledge is looked upon as of little consequence. If so, we must conclude that the views now entertained are quite different from those entertained thirty years ago. We have before us the first nine numbers of the *Mathematical Diary*, a quarterly, which was commenced in New York City in 1825. Of the 175 problems proposed in these nine numbers, Dr. Nathaniel Bowditch, of Boston, and Prof. Theodore Strong, of Hamilton College (afterwards of Rutgers College), solved all. Among the other able contributors, we will mention Dr. Henry J. Anderson, of Columbia College, Dr. Adrian, Editor of the American edition of Hutton's Mathematics, Eugene Nulty, of Philadelphia, Charles Farquhar, of Alexandria, and Charles Wilder, of Baltimore. Among the contributors we also recognize some who are still on the stage of action. Benjamin Hallowell, now teacher of a private school in Alexandria, and author of a key to Bonycastle's Mensuration, solved 52 out of 71 problems proposed in four numbers. G. B. Docharty, now Professor of Mathematics in the New York Free Academy, and author of an Algebra and Arithmetic, solved 80

out of 122 proposed in six numbers. Wm. Vogdes, now Professor of Mathematics in the Philadelphia High School, and author of a *Mensuration*, solved 41 out of 153 proposed in eight numbers. Benjamin Peirce, now Professor of Mathematics in Harvard University, and author of numerous mathematical works, solved 39 out of 45 proposed in two numbers; and lastly, one of the present contributors to the Mathematical Department of this *Journal* solved 28 out of 45 proposed in two numbers.

What we have said in reference to the *Mathematical Diary*, shows that the ablest mathematicians which America has yet produced, have not considered it beneath their dignity to contribute to a Mathematical periodical. It is true that the *Diary* contained many problems of a higher character than those proposed in this *Journal*, but perhaps 75 per cent. of them might not be considered more difficult than those generally proposed in our list. Nevertheless the great Dr. Bowditch did not consider his time misspent in solving the easy as well as the most difficult problems. Will anybody take a hint from this article?

W. D. H.

STATE ASSOCIATION.—Our next State Teachers' Meeting will soon occur. It is hoped that every *live* teacher and some few of the *dormant* ones will attend. It will be the most important meeting yet held by the Association. Educational men of all departments of society are urgently invited to attend. The people of Richmond will gladly entertain all who may attend. A number of the leading Educators of Ohio are expecting to meet with us. We invite the opponent of free schools, feeling confident, if he attends, he will go away a wiser and a better man.

Teachers and all delegates will, on their arrival, repair to the Public School-House on Fifth Street, where a committee will be in readiness to receive them and assign them to places of entertainment. Those teachers from Lawrenceburg and vicinity, who prefer to come by Cincinnati, will return free on the Eaton and Hamilton R. R. Mr. H. B. Wilson has the management of Railroad matters, and we hope he will succeed in securing a free return on all the railroads to all members of the Association. We know of several roads that have already engaged to do so.

J. HURTY, *Ch'm Ex. Com.*

THE CONCERT AT RICHMOND.—It will be seen, under another head, that during the session of the State Teachers' Association, the teachers and pupils of Glendale Female College will give a concert. Dr. Monfort, President of the College, when applied to, to say on what terms he would give a concert by his teachers and pupils, most generously replied, that on no account would he receive more than the traveling expenses.

The funds received from the concert at Richmond, will go into the Treasury of the Indiana State Teachers' Association.

The Wayne County Institute, to commence the 17th of August, is to be conducted by M. C. Stevens.

BOOK NOTICES.

CATALOGUE OF THE OFFICERS AND STUDENTS OF THE NORTH WESTERN CHRISTIAN UNIVERSITY, FOR SESSION OF 1856-57, Indianapolis, June 1, 1857.—From this catalogue, we observe that the University is in a very fair condition, considering the fact that it was not opened more than two or three years ago. The whole number of students enrolled was 141; of whom three were juniors, eight sophomores, or wise-fools, and seven freshmen. This institution admits ladies to all its privileges. This feature is one which we heartily approve. We shall discard the belief in the propriety of educating both sexes in the same institution, when we observe that it shall become customary for the children of the same parents to be either all boys or all girls, and when we shall be convinced that it is improper for ladies and gentlemen to go to the same place of worship. The Professor of Mathematics, Mr. G. W. Hoss, was one of the prime movers in the establishment of our State Teachers' Association. Prof. J. R. Challen, who has charge of the English and Normal School, is a man who lives on *life*, and just such a characteristic is a necessary quality in one who occupies such a position. The venerable S. K. Hoshour, a man whom we love to respect, is Prof. of Modern Languages. The other Professors, John Young and A. R. Benton, we have not the pleasure of knowing, but presume they are worthy of their associates. W. D. H.

XXXII ANNUAL CIRCULAR OF MIAMI UNIVERSITY.—Among the names of the 578 who have graduated at this Institution, we notice the following: John H. Harney, author of *Harney's Algebra*, and Robert C. Schenck, in 1827; Samuel W. Parker, in 1828; Freeman G. Cary, in 1831; Samuel S. Galloway, in 1833; Samuel F. Cary, in 1835; George E. Pugh, in 1840; Charles Barnes, in 1843; and John G. Craven, in 1845. The present condition of the Institution is highly flattering, there being 110 students in the College proper, and 206 in all. R. W. McFarland, whose name is familiar to the readers of the *Mathematical Department*, is Prof. of Mathematics. We are satisfied that this department will not languish under his guardianship. W. D. H.

KENTON COLLEGE, O.—This College is now in a very prosperous condition. The Catalogue, which we have received, is not at hand, and we are, therefore, not able to give the number of students. Lorin Andrews, the President, formerly Agent of the Ohio State Teachers' Association, is one of Nature's noblemen, and every one that knows him (and who in Ohio does not?) knows that Kenyon College could not have a better executive officer. Mr. Lang, formerly of Indianapolis, is Professor of Mathematics. W. D. H.

DELAWARE COUNTY WAKING UP.—A large Educational Meeting was held in Muncie on 31st of July. The Trustees of all the townships and a number of other citizens met. Mr. Hurty addressed them. Consultations on the means of improving schools were held. On Saturday, a Teachers' Association was formed. Mr. H. Clarkson was chosen President, and Joshua Truitt, Secretary. The Association will meet each month. Mr. Clarkson is principal of the seminary there, and is doing a good work.

INDIANA STATE TEACHERS' ASSOCIATION will meet in the city of Richmond, on the 25th, 26th, and 27th days of August next. This meeting of the Association will be one of the most important of any ever held in the State, and the Executive Committee deem it best to have the session continue three days. The citizens of Richmond will entertain all the delegates gratuitously.

The Executive Committee will be ready to make a full report of its proceedings since the first of January, and will present important considerations pertaining to educational interests in our State, for the action of the Association. President J. G. May will deliver his opening address on Tuesday, 10 o'clock, A. M.

A report will be made by E. P. Cole, "On educational condition and prospects in Indiana."

By G. A. Chase, on "Obstacles to the progress of Education in Indiana."

By Miss Belinda Yocum, on "The importance of Teachers knowing more than they are required to teach."

By Mrs. Kate Henkle, on "Drawing and Painting as a branch of education in our schools."

On Tuesday evening. 25th, Madame Caroline Rive, Principal of the Musical Department of Glendale Female College, will hold a Concert.

By M. Hollingsworth, on "Improvements in instruction and government in Schools."

E. E. Edwards will read a poem.

On Wednesday afternoon, Hon. O. P. Morton will deliver an Address. Sub.—"The duty of the State to Educate well all the children of the State."

Rev. Dr. Edwards, President of Hanover College, will deliver an address on Wednesday evening.

Every subject reported upon will be discussed at length.

The following subjects will be presented for extended discussion:

1. The subject of Normal Schools, as recommended by Prof. Mills in his last annual report.

2. The obligation of the State to make provisions for the education of all her children, and to have means to keep the free schools open eight months in the year.

3. Improvements requisite in the examination of teachers, and in the standard of qualifications.

4. The policy of adopting, in the government of schools, the "Self-Reporting system."

Teachers in their several counties are requested to have the above notice of the meeting of the Association, published in the local papers of their counties during the month of July, and to call the attention of teachers and friends of education to the same. Let there be a little effort made by live teachers to get a large meeting. The good work of school reform has been nobly commenced: it remains to be seen whether it will be carried on to final success.

JOSIAH HURTY, *Ch'n Ex. Com.*

M. CHARLES, *Sec'y.*

~~Let~~ All the Railroads in the State, except the Terre Haute and Richmond, and Bellefontaine, will return members who go over their roads, *free*.

We are requested to state that after the 10th of August, the residence of John H. Rolfe will be changed from Cincinnati to Chicago. All persons desiring to secure, on the most favorable terms, "Pelton's Outline Maps and Keys," "Lippincott's Pronouncing Gazetteer of the World," "Holbrook's School Apparatus," &c., &c., will address him at the latter place.

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Aug 15, 1857.

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Reference is made to E. P. Cole, Associate Editor of this *Journal*.


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THE
Indiana School Journal.

VOL. II. INDIANAPOLIS, SEPT., 1857. NO. 9.

SCIENCE AND ARCTIC VOYAGES.

The explorations of the northern coasts of America in search of a northern, or, as it is generally termed in Great Britain, a "North-west Passage" to the Pacific, have been pretty effectually discontinued. If there is an open sea extending over the parts yet unreached, there may, at some future period, be inducements to explore it; but at present the voyage round the almost equally dreary "Horn," sailing or steam-towing through the rocky Straits of Magellan, a canal along some line between the northern and southern continents, the Panama Railroad, Pacific Railroad, and Pacific wagon road, some or all of these seem far more practicable, profitable, and in every sense more desirable, than attempts to crush a passage through ice floes in the Arctic Ocean. The search for Sir John Franklin's party—commenced this year by a small propeller from England, the sides of which are *very flaring, to induce the vessel to rise when pinched in the ice*—is probably the last which will be undertaken, even if the hope to find important traces or even records of the lost explorers should be fully realized.

But it is none the less true that the explorations of the last ten years have added to the wealth of the world, by furnishing important scientific information. In regard to its small amount, as compared to the cost of its acquirement, we would protest, in the language of a recent writer in the *Massachusetts Teacher*, against looking at knowledge from a mere *commercial* point of view. We ignore, entirely, the price current that shall give us, in dollars and cents, the market value of the discovery of the circulation of the

blood, or the binomial theorem; the magnetic telegraph, or the laws of the trade-winds; the sources of the Niger, the cotton gin, or the steam engine. Such views are unworthy of an age of intelligence. Knowledge has other uses besides that of supplying the wants of the body, and its mission is infinitely higher than the gratification of a sordid love of money.

Within the last forty years a coast line of more than four thousand miles, in those regions, has been examined and accurately laid down upon navigator's charts; and to this we may now add that examined by the recent expedition of the late Dr. Kane, the results of which expedition are very considerable, and especially valuable for their accuracy and correctness. In North Greenland and the vicinity of Smith's Sound, nearly one hundred localities, such as capes, mountains, islands, bays, &c., were visited and determined with the utmost precision. Northern British America has been thoroughly explored, and nearly every feature of the country and climate between the Great Lakes and the Frozen Ocean has been carefully noted by keen observers. The Northwest Passage, that problem of ages, long and painfully sought for, has been tolerably well proved to exist.

Terrestrial magnetism and the variation of the magnetic needle; astronomical observations and experiments with the pendulum for ascertaining the true form of the earth; ocean soundings and the freezing of salt water; records of the weather and the course of atmospheric circulation, are subjects which have received much attention. Two expeditions alone, some years since, gave us a knowledge of more than twenty families of plants of the natural order. Unaccustomed as we are to associate vegetation with the ice-bound North, it is nevertheless true, that the botany of Greenland enumerates more than two hundred and sixty species.

The discovery of a stunted shrub or an unknown moss, in Spitzbergen or North Greenland, or the examination of a limestone cliff on the shores of Coronation Gulf, may, as isolated facts, be unimportant; but in the hands of the botanist and the geologist they may supply a vacancy in classification, or throw additional light upon the conditions of vegetable existence and the structure of the earth, of inestimable value. In these days of pomological and horticultural conventions, scientific agriculture, and universal Chinese sugar cane *furor*, we need use no special pleading to convince the reader of the importance of extending our investigations in the sciences of botany and geology, theoretical and practical.

England, through her Board of Admiralty, has recently discarded her own charts of Baffin's Sea and adjacent waters, and adopted instead, those prepared from the observations of the late Dr. Kane—a graceful tribute to their accuracy, and a fitting acknowledgement of the importance of this kind of information.

By reading the account of Dr. Kane's expedition, every person who has to encounter the severity of even a New England winter, will be furnished with a better knowledge of the powers and requisites of his system to meet and to withstand, successfully, the hostile elements and vicissitudes of climate to which he is inevitably exposed. The experience of Dr. Kane and his companions in subsisting upon scurvy grass and the coarse meat of the walrus and seal, is worth more to the physiologist than a volume of mere theories upon animal heat. Indeed, every person, unwittingly it may be, becomes a sharer in the common good derived from the explorations which are now apparently so unsuccessfully being terminated.—*Scientific American.*

THE BASTILE.

The Bastile, or Bastille, was the name used in France to denote a fortress, or State Prison. There have been three of that name at Paris—the Bastile du Temple, the Bastile of St. Denis, and the Rue St. Antoine. It was originally intended simply to protect the city. Hugues d'Aubriot, Prevost des Marchands, in the reign of Charles V., laid the first stone, April 22d, 1369, by order of that king. The building was completed in 1383, in the reign of Charles VI. It was one of the strongest fortresses of the kind in Europe. The accounts of the prisoners were kept as follows: I. Name and quality of the prisoner. II. When entered. III. By whom entered. IV. When discharged. V. By whom discharged. VI. Cause of detention. VII. Observations or remarks. The longest imprisonment known was that of Isaac Armet de la Motte, who was removed to Charenton (a lunatic asylum and prison) after being confined fifty-four years and five months. Several prisoners remained there for thirty years and upwards. The first historical mention of any imprisonment in this fortress was that of Hugues d'Aubriot himself, who had given offense to the clergy, and who

was accused of blasphemy and impiety, and sentenced to imprisonment for life, but who afterwards obtained his liberty.

The only prisoners known to have made their escape were De la Tude and D'Aligre, who were confined together. They constructed a rope-ladder near one hundred and eighty feet long, with rounds of wood covered with flannel, to prevent a rattling noise against the walls; the other, a wooden ladder thirty feet long. These they constructed out of their linen, stockings, and other parts of their clothes, and by saving the billets of wood given them for fuel. They cut through the iron gratings in the chimney, which they ascended. Taking advantage of a dark night they finally escaped. After the revolution of 1789, La Tude claimed his ladders, and they were publicly exhibited in Paris.

Of all the prisoners, no one has excited so much curiosity as the Man with the Iron Mask. There has been a most extraordinary secrecy in regard to this personage. Some suppose him to have been a twin brother of Louis XIV., the celebrated Duc de Beaufort, the unfortunate Duke of Monmouth, the Intendant Fouquet, and Ercole Matthioli, prime minister to the Duke of Mantua. But, so far, all is conjecture.

The Bastille was demolished by the excited populace at the commencement of the Revolution in 1789. The spot where it once stood is marked by a column containing its history.—*Prisoner's Friend.*

CONTRASTS.

Resting upon the velvet softness of a cushioned couch, a baby child is sleeping. Its white and dimpled hand is buried among the thick roses of its soft resting place. Its long embroidered robe spreads its fine wreath of mimic flowers among the more gorgeous trceries of the carpeted floor.

By its side, in full happiness, sits the young mother, and her gentle heart swells with proud joy, as she listens to the admiring words of those who stand gazing at her first-born boy, and whispering praises of his sweet loveliness. And now they bend before him for a gentle kiss, as if he were a crowned king whose very breath was royal.

And the soft breeze, coming through the open window and rose-wreathed lattice, lifts the fair curls from the forehead of that blessed child, and the sunlight plays about his golden head like a halo.

A sister sunbeam passes through the broken and narrow panes of a not far distant room, where sits another young mother; young, but oh! how joyless; for she sits gazing upon the blue-white, cold face of her dead babe. All day yesterday, and all night, she held him to her aching breast and prayed to God to heal her child; and the gentle Angel of Death, this hour, has brought an answer of peace.

So she lays him down upon the hard, bare floor—he will not shrink from it now—and takes his twin sister up from that rude bed to her aching breast, and when the child moans, anxiously, for food, she has none wherewith to stay its keen suffering.

And now the sun goes down, and bright lights gleam upon the wakened baby upon its velvet couch, while darkness shrouds the baby in its death-sleep and the starving child by its side, moaning, moaning, moaning.

Far down in the southern land a fair-faced mother tosses, cheerfully, her merry baby in the sunshine, and weaves it long wreaths of sweet flowers, and fans it to sleep with the broad petals of the white Magnolia blossom. And now it sleeps—sleeps so deeply that it starts not, though a bitter shriek rings on the frightened silence.

Down in the hot cotton field a dark slave woman nursed her little one, and in the depth of her misery she blessed God for the precious boon. Without one moment's warning, or one parting kiss, he is torn from her warm and loving embrace; and now he is gone; his little wailing cries grow fainter and fainter in the distance—and up among the Magnolia trees the fair white child sleeps on.

Far, far away, over wide lands and long centuries. The moonlight streams upon a manger-floor; and there, in the stillness, unbroken but by the loud breathing of sleeping breasts, rests in young Mary's arms the young child, Jesus. Closed are those infant lips; still is that infant tongue; yet a day shall come when, before the assembled multitude, that holy child shall cry, "The Spirit of the Lord is upon me, because he hath anointed me to preach the gospel to the poor. He hath sent me to heal the broken-hearted, to preach deliverance to the captives."

Oh! Holy One! thy children wait for thee. Poor, and broken-hearted, and captives, they wait for thy great deliverance.

As of old, the moonbeam shone upon thy lowly bed, shine thou into the dark places of human breasts, and send therein the sweet light of pity and of love ; that, fed, and clothed, and healed, and freed, the cry of agony from these, thy little ones, may go feebly wailing up to the heavens no more forever.

M. B. C. SLADE.

ENGLAND.

It is calculated that about 8,000,000 persons in England and Wales can not read or write. This is nearly half the population. It is also calculated that of all the children in England and Wales between the ages of five and fourteen, more than half the number do not attend school at all ; and that those belonging to the poorest classes who do receive instruction, receive such a meager and insufficient amount, as to render it of no practical value. A little reading and writing, very often so imperfectly learned that they neither afford amusement nor advantage, and a garbled history of the Scriptures, is all the knowledge that the majority of the poorer children carry with them from school. The very farmers themselves, a class above the abject poor, can not, in many instances, read or write ; and what little even they might have learned in the days of their miserable instruction, has passed from them, more because of the fatal mode of education, than because of any inaptitude in themselves.

Throughout Western Europe, the average of educated persons is far beyond that of England.

"In 1770, 250,000 freehold estates were in the hands of the same number of independent families ; at the close of 1815, the whole of the land in England belonged to 32,000 proprietors. Yet very little more land has been brought into cultivation, for of the 15,000,000 statute acres left untilled in 1827, 12,000,000 were still uncultivated in 1847. The new poor law reduced the annual rate of £7,000,000 to £5,000,000 for the support of pauperism ; yet in 1848, one in eight out of the whole population of England was receiving parochial relief, while 40,000 to 50,000 vagrants subsisted on the casual charity of individuals, or the apportioned funds of 'tramp wards,' &c. Out of 30,349 of both sexes last year com-

mitted for crime, 9,691 could not read nor write at all, while only 81 had received a good education.

"In Western Europe there is free trade in land. In England a peasant can rarely obtain the uncertain tenure of a leased farm, while copyholds and freeholds are merged in the larger estates. In Switzerland, Saxony, and Germany, every rood of land is highly cultivated in the most uninviting places, and despite the sternest obstacles. In Ireland, in 1849, *all* the lands of one barony, in the county of Cork, comprising 80,000 acres, were thrown out of cultivation. In the union of Clifden, lands of an annual rental of £9,000 were likewise made waste; and 11,000,000 statute acres in Great Britain, generally, remain untouched by the plough or the spade."

The causes of crime, assigned by Mr. Kay, are the following:

1. The great and continual neglect of the intellectual training of the poorer classes.
2. The neglect of their religious education.
3. The game-laws.
4. The system of laws which affect land.
5. The gin palaces.
6. The want of classification in prisons.

The *London Times*, of the 22d ultimo, remarks: "Under ordinary circumstances, an English laborer has no more prospect of becoming a proprietor, than he has of acquiring a kingdom. Even if he should save the incredible sum of five hundred or a thousand pounds sterling, he is still as far off as ever.—*Paris Cor. Journal of Commerce*.

NIAGARA SUSPENSION BRIDGE.—A tubular bridge is talked of, to connect the United States with the Canadas, and to take the place of the celebrated Niagara suspension bridge, the dimensions to be as follows: Length of bridge, 840 feet; height of piers above water, 225 feet, with a double railway track, carriage ways, etc. The reason given for this project is the familiar one, that suspension bridges are liable to failure. It is averred that the suspension bridge at Niagara Falls is not to be a permanent structure; that chain bridges can not be depended upon for a longer period than seven years, the action of the weather and the wear and tear to which they are exposed, rendering them dangerous after that time. We find the paragraph in our exchanges, and give it without endorsing its accuracy.—*Scientific American*.

[From the *New Church Magazine* for Children.]

THE TRANSITION.

When daylight fades, and night returns,
 Bringing to weary hearts repose,
 How sweet to lay the head at rest,
 And the tired eyelids close;
 Cast off the garments of the day,
 And let the earth-stains fade away,
 And wake, refreshed with quiet sleep,
 When morning's light breaks o'er the deep.

So let it be when death is near,
 Bringing to weary hearts release;
 How sweet to lay the head at rest,
 When angels whisper "Peace;"
 Cast off the garments of the clay,
 And let the earth-stains fade away,
 And wake, refreshed from that last sleep,
 Like childhood from its slumbers deep

We fear not what to-morrow brings;
 Its prophecy to day is spoken,
 And life begins, when morning dawns,
 With current still unbroken.
 The thoughts, the hopes of yesterday,
 Renew their flight again to-day;
 Like birds that seek the North in Spring,
 Resting, to rise with strengthened wing.

Thus life's to-morrow, heaven, will be
 The flower whose bud was folded here,
 The gradual opening of the day,
 The rounding of the sphere.
 By fine gradation journeying on,
 From light to light, from zone to zone,
 We, as the future opens wide,
 New prospects greet on every side.

And day by day, from state to state,
 By gentlest growth, the soul will rise;
 No sudden shock will mar the peace
 And splendor of the skies.
 As childhood into manhood rose,
 The angel from the human grows;
 And all that love has planted here,
 Ripens to perfect beauty there.

STATE TEACHERS' ASSOCIATION.

FIRST DAY.

Morning Session.

The semi-annual meeting of the State Teachers' Association convened at Starr Hall, Richmond, August 25.

The meeting was called to order at 10 o'clock by the Rev. Jas. G. May, of New Albany.

Prayer by Rev. V. M. Beamer.

On motion, M. C. Stevens, of Richmond, H. Clarkson, of Muncie, and P. Snow, of Evansville, were appointed Assistant Secretaries.

H. B. Wilson, Treasurer *pro tem*.

Constitution read by the Secretary.

W. D. Henkle moved that a committee be appointed to prepare certificates of membership, to be printed on cards, for preservation.

Committee—Messrs. Henkle, H. B. Wilson, and Vawter.

H. B. Wilson then stated that he had succeeded in making arrangements with railroad companies to convey teachers to and from Associations at half fare on all the roads, except two.

The President, Rev. J. G. May, then addressed the Association. He said:

If historians are to be trusted, the genius of Semiramis was not circumscribed by the walls of Babylon. In every province she left monuments of her devotion to the people, in works of usefulness, grandeur, or beauty. The story of Semiramis, the contemplation of the great works she accomplished, suggested to the speaker his theme for the occasion—"Woman's noblest mission." The mere supervision of the domestic duties is not woman's noblest work, nor, according to the romantic nature of the sweet misses of sixteen, reigning as belles among a crowd of brainless admirers. It is not enough that she be a wife, a sister, or a mother. It is not enough that she be a good housekeeper. She may be faultless in all such respects, and still fall far short of her mission. She may be a most devoted mother, even slavish in her devotion to her children, most denying to herself, most lavish to them, but still never asking herself the solemn question, Why are their immortal minds committed to my care? She may be a sister, loving, devoted, and self-sacrificing, and still never rise to the true conception of a sister's duty. In order to rightly understand the real mission of woman, we must consult the Bible. God saw, even in the pleasant walks of Paradise, that "it was not well for man to be alone," and woman, pure, loving, and beautiful, was then called into existence. In the language of the Sacred Word, woman was

not made a mate, but a "help meet" for him. We have, in the simple declaration of the Bible, the true mission of woman; it is of divine appointment—she is a teacher. She may be a wife, a sister, a mother; she may never be seen in the school-room, still, wherever she is, whatever she may be or do, she must be a teacher still. She makes her impress, too, upon her pupils. In a large school, over which the speaker had charge, comprising six different grades, he saw at one time all the different departments playing school, and by the appearance and action of the children who personated the teachers, he was able to tell to which department the child-teacher belonged. One was pacing to and fro with a large stick under her arm, speaking in the tones of a general; another was passing quietly around, gently encouraging her pupils—thus personating her own kind hearted teacher.

The influence of the mother as a teacher can not be too highly estimated. Let the teacher go to his school-room and carefully review the character and conduct of his pupils; let him divide them into classes—the truthful, the amiable, the confiding, the stubborn, the lying, the hypocritical—and almost invariably the impress of the mother and the sister can be seen in the character of the child. Do you find a child unwilling to submit to reasonable authority? Go to his home, and you will find him the indulged pet of some weak and foolish mother. The influence of the mother is far more powerful than that of the father, and if she be weak and injudicious, the child will take his character from her. Illustrations of this fact had often come within the speaker's observation.

Themistocles said of his son, "that boy rules the world, for he rules his mother, his mother rules me, I rule Athens, Athens rules Greece, and Greece is mistress of the world."

The President closed his address with some remarks on the qualifications necessary to success. Not only should all who take upon themselves the calling of the Teacher have good literary and scientific attainment, but they should have a special training for their work. The Primary Teacher, as much as any other, needed experience. She must also be active and energetic, full of animation, and capable of imparting her enthusiasm to her pupils. Whoever can not keep brightly burning the fires of emulation in the mind of the spelling-book pupils, is not fit to be a teacher. No one who does not love her profession should enter the school-room.

On motion of Mr. S. T. Bowen, the thanks of the Association were tendered the President for his able and interesting address.

Order for the afternoon read by Mr. Hurty.

Afternoon Session.

Meeting called to order by Vice President D. W. Henkle.

Moved by Mr. Hurty, that no one shall speak more than ten minutes at a time, or more than twice on the same question, except by special permission.

First business before the meeting, discussion upon the lecture of the morning.

Mr. Hurty, while agreeing in the main with the position of the speaker, thought that some of the ideas were overstated. If women, indeed, ruled the world, we should now have a good school law and a good temperance law in the State. Mothers do not wholly form the character of the children. The influence of the father is quite as great.

Mr. Stevens said that the remark that we ape the teachers of our childhood, ought to be taken with some caution. Most of us could relate strange experiences in respect to the habits and manners of our teachers, and although we might see much which was reprehensible in the teachers of our earlier days, it often made little impression upon our lives or characters.

Mr. Monfort assented to the proposition "that woman ruled the world," with some exceptions. There were many teachers in this convention who had never been ruled by a woman, but he hoped they soon would be.

Mr. Taylor offered a resolution in relation to woman's wages, which was laid upon the table.

Mr. Roberts dissented to the proposition that woman was, in any sense, exclusively the teacher. If so, what have we "male fellows" to do in the school-room.

Mr. Hurty thought that if women are so essentially and exclusively teachers, schools for the education of females should be differently conducted. He contrasted the thorough teaching in colleges for males, with the superficial education so common in female seminaries. Two or three studies at a time are thought sufficient for students in first class colleges, while the miss of the boarding school must have from fifteen to twenty. Males can pass through a few branches of study only, while the young lady of sixteen must pass through all the studies ever heard of, as well as some never heard of. He would have males and females educated together, and both subjected to the same rigid and thorough course of study.

Mr. Bowen thought the remarks of Mr. H. were calculated to do injustice to teachers of female seminaries. He thought that green-horns came from colleges for males quite as often as a similar class from schools for females.

Next subject—"Improvements requisite in examination of teachers, and the standard of qualifications."

Mr. Adams spoke of the responsible position of the teacher, and hence the necessity of greater attention to the moral character of the applicant for this office.

He denounced in the strongest terms the use of tobacco.

He also insisted upon greater thoroughness in the examinations. We now require too many things to be taught, and the result is that our teachers are superficial in all. Make the number of

branches of study few, and subject the applicant to the most rigid examination possible. Exceptions may be made in case of graded schools, and the standard of scholarship of the teachers may be graduated according to the class of scholars taught.

Discussion upon this subject was postponed, and a lecture was delivered by Mr. E. P. Cole, of Bloomington, on the "Educational Prospects and Condition of Indiana."

The Association took a recess of five minutes.

On being called to order, the report of Mr. Cole was accepted, after some humorous sparring occasioned by the length of the report, which exceeded the time (forty-five minutes) allowed for the addresses.

On motion, a committee of four was appointed to pass through the hall and receive the names of persons who wish to become members of the Association.

On motion, adjourned to 8½ o'clock, Wednesday morning.

SECOND DAY.

Morning Session.

Meeting called to order at half past eight.

Prayer by Rev. Mr. Monfort.

Minutes of the preceding day read, corrected, and approved.

Visitors from other States were invited to participate in the discussions.

First: Business discussion on the report of Mr. Cole, on the educational prospects and condition of Indiana, by O. Phelps, E. P. Cole, A. J. Vawter, Mr. Terwilliger, H. B. Wilson, and Rev. Mr. Abbott.

Mr. Phelps opposed the views of the report so far as they regarded Normal Schools. The only way in which the Free Schools could be made to take their proper position and exercise their due influence, was by providing them with well qualified teachers, and for this we must rely, in a great measure, upon Normal Schools. He maintained that a well qualified teacher, in a district sustaining a school only three months from funds raised by tax, will be able, in most cases, to arouse a public sentiment which will cause the school to be continued by subscriptions eight or nine months in a year.

Mr. Terwilliger, of Anderson, thought the teachers were as well paid in Indiana as in any other State. In New York, where they had a fine Normal School, female teachers, in many of the rural districts, received but one dollar a week.

H. B. Wilson, of New Albany, said that he was in favor of such schools, notwithstanding his friend Cole had stated that there were

more good teachers in the State now, than found employment; and that many of them were compelled to seek other occupations. For his part, his experience and observation had been somewhat different; that after a probation of ten years or more, as County Examiner, he was satisfied that most of the schools in the rural districts were taught by those who were very poorly qualified to assume the duties of a teacher. At least, he knew this to be the case in Floyd County, and he believed the same would hold good in every county in the State. So far from the remarks being true, that there are too many teachers in the State to supply the demand, he had known the Trustees of New Albany township, outside of the city, to wait till one school was out to obtain the teacher for another; and then to employ one of third or fourth rate qualifications, for want of better material. The examiner often finds that should he be as rigid and thorough in his examinations as the law seems to contemplate, but few would receive licenses to teach; and, consequently, not one in ten of the schools would be supplied with teachers. It has been said that such teachers and schools are worse than none; that they are a nuisance; but he was not ready to subscribe to the doctrine. He believed it was better that the child should be taught to read, simply, by an unqualified teacher, than not to be taught at all; that part of a loaf was better than no bread. That although he felt as great a contempt for the habit of using tobacco by the teacher, as any man, yet he would rather his child should be taught by an inveterate chewer or smoker of the weed, than not to be instructed at all. Most of the schools in the country districts are taught, or "kept," rather, by men who work upon the farm for nine months in the year, and who teach school the other three, simply because they can command a little higher wages than they could by chopping wood or splitting rails.

This will continue to be the case, till we have Normal Schools for the purpose of educating teachers expressly for the business of teaching. We need four of these schools in Indiana, located in the four quarters of the State. We have schools for the purpose of educating young men for the professions of law, medicine, and theology. Who ever thinks of a man's being qualified for any of these callings, till after he has studied long and rigidly the science of the art he is to practice? Although he may have been through college, and obtained his diploma with much honor to himself, he had yet to learn that there was any necessary connection between good scholarship and good teaching; between an accurate knowledge of English Grammar or Arithmetic and the art of disciplining a school. It is true, there is, now and then, a Locke Amsden, a universal genius, a jack of all trades, but, as a general rule, men have to learn themselves before they can teach others; yet custom is such that as soon as a young man or woman returns from college, without the least instruction in the most difficult of all professions, the art of imparting the knowledge they possess to others, or the art of governing themselves—to say nothing of others—they are considered fully competent to assume the responsible position

of teacher; to be intrusted with the keeping of a priceless gem—the child's intellect—the immortal mind!

Before he sat down, he wished to say a word about the darkness that exists in Indiana, and of which we have heard so much, and the opposition of the people to schools, and laws to sustain them. He had lived in Indiana sixteen years, and thought he understood the Hoosier character pretty well; and he had never yet found any people more ready to go into any improvement than they whenever they are satisfied that it will pay; that it is for their interest to go for it. He believed that Indiana had been slandered. Her people are not so ignorant as they have been represented. Great advancement has been made in education in the last few years. Great improvements have resulted from the organization of this Association, and the circulation of the *School Journal*. Our Association has been in existence but a little over two years, yet Indiana is far in advance of what Ohio was, when her State Teachers' Association had been formed an equal length of time. He did not think the teachers of the State need feel discouraged. We have many good schools scattered over the State.

The public schools of Indianapolis, New Albany, Lafayette, Richmond, Evansville, Fort Wayne, Shelbyville, Laporte, and many others, dotted all over the State, are so many beacon-lights to lure others forward in the same good cause. Like so many cities placed upon the hills, whose lights cannot be hid. All that the faithful and energetic teacher has to do, is to go on in the good work, resting assured that there is a glorious day, which will ere long dawn upon the educational interests of Indiana.

Mr. Abbott, of Dunlapville, could not see how the Normal Schools could supply the State with teachers. We need 10,000 teachers, and to supply them we must not depend upon Normal Schools, but upon well conducted common and high schools. He was not opposed to Normal Schools, but thought we could not depend upon them to supply our teachers. As to wages of teachers, we were already paying too much to many of our teachers; many of them ought to be charged for their board, instead of receiving wages. He did not believe that the condition of the country schools was as good now as it was twenty years ago. Improvements had been made in the academies and the colleges, also in the schools of the cities and villages, but in other respects things had retrograded. He believed that the small amount of ten cents on \$100 did more harm than good.

Mr. Heilscher, of Indianapolis, described the Normal Schools of Germany. The applicant for the office of teacher must spend three years with an experienced teacher, studying and teaching. After passing an examination, he is admitted to the seminary connected with the Normal School, where he must study two years; after which he must spend one year in the Normal School, learning how to teach others the studies he has pursued during the five preceding years. In these schools the tuition is free, and generally the board of the pupil is also free. In regard to taxes for

schools, those who owned the land ought to pay for the education of those who had none. It will do them no wrong; it makes their property more secure, and if they do not tax themselves to support schools, they must be taxed to support penitentiaries.

Mr. Hurty said that if we were energetic and determined, we could make the schools of Indiana what they should be. He had passed all through the State, and he knew the sentiment of the people. They were ready for the measures necessary to make the free schools as efficient as they should be. They only needed some one to lead the way, and he looked to this Association to do this.

Mr. Brady, of Connersville, said we must exert our personal influence in relation to school reforms. This is one of the most important instrumentalities in awakening the people to their educational interests.

Mr. Cole offered the following :

Resolved, That, in view of the great educational destitution in our State, and in view of the many and great defects in the school law—defects which serve as barriers to all educational effort—a committee of five be appointed to present to this Association at its next semi-annual meeting, what they consider the prominent defects of the system, and also propose the needed remedies with reference to a memorial upon the subject, by the same committee, to the next State Legislature.

Mr. Phelps, of Indianapolis, said that these reports are not necessary for us, and they will not be read by the Legislature. We must work among the people, and then the Legislature will be right.

Mr. Hinkley, of New Castle, said there was danger that the whole system of free schools would be overturned. Many members of the Legislature wished it destroyed, and would so vote to-day. This committee ought to be appointed; it would have a great and good influence.

H. D. Perry, of Wilmington, was sorry to hear the present law denounced as a nuisance. It had done much good.

Mr. Vater, of Indianapolis, said we had tried this memorializing of the Legislature. We tried it last year, and the result was disastrous. By it we nearly lost what we had already obtained. The Legislature could do nothing of itself. It dared not impose a tax of 20 cents for school purposes. The people had not been aroused, and no legislator would dare to risk his popularity in the support of such a measure. Make the people feel that they need good schools, that the present law is not efficient, and then it will be of use to memorialize the Legislature.

Mr. Heilscher.—If persons are opposed to the school system, let them put it down if they dare. We have nothing to fear. We had accomplished much without any real system, and as the schools now are, they have too much strength to be put down. We must not expect to do everything at once. We shall get but a little at a time,

but we shall, by and by, if we persevere, get such a system as we need. He was in favor of the resolution.

Mr. Bowman was also in favor of the resolution.

The discussion was continued at some length, and with much zeal.

The resolution was finally adopted, and E. P. Cole, Charles Barnes, Mr. Bowman, B. C. Hobbs, and S. R. Adams, were appointed a committee.

On motion, the resolution of Mr. Taylor, in reference to the wages of female teachers, was taken from the table and discussed with animation both pro and con, by Messrs. Phelps, Cole, Bronson, Heilscher, J. S. Wilson, S. T. Bowen, T. J. Vater, Rev. Mr. Monfort, Mr. Bowman, and by Mrs. Scott, Mrs. Dr. Thomas, and Misses Way and Birdsall.

Mr. Phelps objected to females receiving the same amount of pay as males, upon the ground that they failed to manage scholars; that in many instances they ruined schools which were afterward reduced to order by males.

Mr. Bronson remarked that since a gentleman had stated "that no one will dare to speak on the negative of this question," he rose, not to show his bravery, but, on the other hand, to prove that the amiability of our female friends was so great they would harbor no resentment towards those who honestly oppose them. One cause of the low compensation of female teachers is the fact that they can procure many of the necessities of life at a lower rate than males. This rule will work both ways. If females are to receive as much as males, they will be called to pay the same rates. He could not agree with Mr. Phelps in regard to the inability of females to govern; for the moral influence of a real woman, and whole souled teacher, more than over-balanced the superior physical strength of man. The gentleman's argument, furthermore, had no force; for the resolution expressly declared that females were to render the "same service," and, of course, that implied the *ability* to render it.

Mrs. Scott replied, that ladies had often succeeded better in managing disorderly scholars than male teachers, and, as it had been observed upon the floor of this Association, ladies are the great teachers, they should certainly be paid the same as males, where the services rendered are the same.

Mr. Cole asked Mr. Phelps, in reply, whether he was still in the market, presuming that if he was, he must possess a large amount of moral courage to face the ladies present and make the remark he did. Mr. Cole claimed for ladies an equal or superior ability in management with male teachers, and gave some instances of ladies who succeeded in governing disorderly scholars better than male teachers. He also advocated the resolution as founded in every principle of law and justice.

There were also remarks made by several ladies, all pursuing the same train of thought with Mrs. Scott.

Mr. Bowen objected, not that ladies should not be paid equally with males, but that the whole matter, despite all discussion, would be regulated by the irrevocable laws of trade, that when the demand exceeds the supply, wages would come down, and *vice versa*. He therefore proposed laying the whole subject upon the table.

Mr. Vater objected to Mr. Bowen's proposition, and desired the matter definitely disposed of in the affirmative.

Rev. Mr. Monfort took ground against the passage of the resolution because it would be inoperative, and not possibly effect the object proposed. With others he thought it could not be accomplished by the passage of any resolution. He thought that the resolution looked in the direction of the so-called odious doctrine of "Woman's rights."

Mrs. Scott replied, reiterating her former arguments and reasons, adding to them much strength and effect.

Mr. Monfort explained, disclaiming any opposition to woman's just pay, but repeated his former reasons against the resolution on the ground that nothing would be effected by it.

Mr. Bowman moved to lay the resolution on the table, giving similar reasons with Messrs. Bowen and Monfort. Not passed.

The question was then loudly called for, and passed in the affirmative.

On motion, the Association adjourned to 2 o'clock, P. M.

Afternoon Session.

Convention met at 2 o'clock.

Mr. Hurty, agent of the Association, read a report in relation to his labors during the present year. County Associations had been formed; old organizations revived; Teachers' Institutes had been held in a large number of counties. He had lectured to the people; had visited schools; labored with school trustees; and, in many instances, had succeeded in having free schools established, and money raised for the building of good school-houses. The condition of education throughout the State was darkly painted, and sustained the report made by the former agent, Mr. Cole. He advocated the continuance of an agency, even though the burden might come heavily upon the teachers. It was one of the principal instrumentalities upon which we must rely. He advocated the uniting the offices of State Agent and editor of the *Journal*. The report was received, and the following resolutions were offered by Rev. Mr. Abbott:

Resolved, That it is the opinion of this Association, that our duty to ourselves and to the cause of education, requires that an

agent be kept in the field to lecture, hold institutes, and in every way possible to further the cause of education.

Resolved, That the Treasurer and Executive Committee be required to report the exact condition of the finances, real and available, that we may know what remains to be done.

The first resolution was laid on the table, and 9 o'clock, Thursday, was assigned as the time for hearing the report of the Treasurer and Executive Committee.

X Next in order was the report of Mr. Hollingsworth, on Improvements in the methods of School government.

The absence of the reporter during a portion of the afternoon, prevents his making any connected report of this address. The leading idea was that schools were to be governed by electric influence. To most of the audience his views appeared wild, impracticable, and visionary, and at times it seemed hardly possible to tell whether the author was in earnest or was treating us to a capital burlesque on animal magnetism.

A humorous discussion followed, and was continued to considerable length.

Mr. Henkle said that if the views of the lecturer were true, they would, if carried out, save a deal of labor. A teacher need only enter his school-room, and will that his scholars should know everything that he knew, and then send them home. We might dispense with school taxes, and one teacher might educate the whole State, as he would be needed but a few hours in each place.

The discussion was continued in a half-serious, half-jesting manner, until finally Mr. Hollingsworth was called out in defense. He maintained the entire truth and practicability of the views he advanced, and fully met the humor and sarcasm which had been heaped in such an avalanche upon him.

The discussion, though not very profitable, and in many respects passing out of the proper field for the deliberations of the Convention, was much enjoyed by the audience.

In the evening an address was expected from Hon O. P. Morton, but, at a late hour of the day, word was received that important legal business would prevent his meeting his engagement with the Association; and Dr. Longshore, of the Female Medical College of Philadelphia, who was present, was invited by the Executive Committee to address the teachers in the evening.

Evening Session.

Association met at 7½ o'clock.

X Dr. Longshore, of Philadelphia, proceeded to address the Association on "The Medical Education of Woman."

The employments usually assigned to woman are of a subordinate character, and the remuneration which she receives is little more than one-fourth that given men, and women have acquiesced in the inferior position assigned to them. The institution which he represented had for its object to place woman in a situation to command the influence and the compensation to which her capacity entitles her. The time has but recently passed when women were not considered capable of teaching. Now we believe that they make the best of teachers, and all over our country they are now employed in a large majority of our schools. In every position in which woman has been placed, she has shown herself equal to the task. Theodore Parker says, "woman is by nature a nurse and half a physician," and this is true. Woman is equal to man in her perceptions, and this is one of the important characteristics of a successful physician. She is superior to him in her sympathies, and nothing is more needful in the care of the sick. No just objection can be raised to woman's entering the medical profession on the score of physical inability. Give woman proper exercise in the open air, give her the conditions of health which man's employments give him, and she will be able to undergo an amount of fatigue equal to that of man.

When the institution was opened at Philadelphia, ten or twelve females entered; they were as successful as males in mastering all the technicalities of the science, and at the examination at the close of the second term, they acquitted themselves in a manner which could not be surpassed by the students in any of the best established medical institutions in the country.

Another test awaited them: It was possible that in the study of medical science they might be successful, but how would it be when they came to the practice? How would it be when it came to the exercise of solid judgment and clear discrimination? Of the seven who graduated then, all are in successful practice. In every instance, they are doing better than their male competitors. The experience of these has shown that so far as mental capacity or physical ability is concerned, woman is fitted for this profession. When Norfolk was smitten, when no ties of humanity could bind man to his fellow, when no sound struck upon the ear, but the coffin maker's hammer, who was the first to answer to this call of the dying! A frail, delicate woman, a poor shoe binder of the North, regardless of self, regardless of the ties of friends and home, went to the Howard committee and demanded a passport to the ill-fated, plague-smitten city; and there for long weeks and months, amidst the shrieks and groans of the dying, she stood to her post, and performed duties which any *man* would have shrunk from. It was not till it was reported that women had gone there to do the work, that men volunteered their services.

The speaker paid eloquent tributes to the labors of Florence Nightingale and others, who rank among the noblest spirits and benefactors of the race.

THIRD DAY.

Morning Session.

The Association was called to order at 9 o'clock.

Rev. Mr. Smith, of Richmond, offered prayer.

By Mr. Vawter, of Lafayette :

Resolved, That we, as an Association, recommend to citizens where this Convention may hereafter be held, that no preparations be made for the free entertainment of gentlemen.

Amendment by Mr. Vater, of Indianapolis, that instead of gentlemen, only, the resolution include all members of the Association.

Mr. Holbrook, of Ohio, opposed the amendment and the resolution both. One of the great advantages of these meetings is the educational interest which is aroused by the mingling of the teachers with the citizens. The very fact of this hospitality being tendered us, established friendly relations between citizens and teachers. He had seen the influence of conventions held under the circumstances proposed, and it was injurious. The teachers were dissatisfied, the convention was lifeless, and the citizens took no interest in the proceedings.

Remarks were also made in opposition to the resolution by Cole, Smith, and Kinman, and in favor by Mr. Vawter.

The resolution was laid on the table.

S. T. Bowen, Treasurer of the Association, made his report, which was received.

The subject of Normal Schools was then discussed.

Mr. Kinnan said: We need a Normal School, and shall the Association do nothing in relation to it because the people are not ready for it? How will they ever become ready for it if we do not act. Suppose our Legislature should impose such a tax as would keep our county schools open eight or nine months in the year; where are our teachers to come from? We must not wait for the State to act, but we must establish Normal Schools ourselves.

Jas. G. May, of New Albany, apprehended that the condition of the schools in Indiana was not as bad as represented. He was in favor of Normal Schools, but he would prefer one in every large city and village in the State. He wished to see our higher institutions in those places all become Normal Schools. This was the only thing which would meet our wants.

Mr. Vawter, of Lafayette, agreed with Mr. May in regard to the educational condition of Indiana. The picture had been too deeply colored. He was in favor of the resolution. Within the past year a few citizens in one of the cities in this State offered to donate fifteen acres of land worth \$1000 per acre, and also \$15,000, to a literary institution which would not promote the educational interest of the city one-half as much as a Normal

School. Let us go to work, and we shall find that cities will see their interest in this matter.

Mr. Holbrook, of Ohio, spoke of what had been accomplished in his State by Normal Schools. It had been done by the teachers, and if we wished to accomplish anything in Indiana, the teachers must go to work. We could do whatever we attempted to do.

Mr. Phelps advocated the same views. We must have well trained teachers, and we could obtain them only by means of Normal Schools.

Mr. Lawrence believed that the recommendation of the late Superintendent offered the most feasible plan for Normal Schools.

On motion, the resolution of Mr. Abbott, in relation to a State Agent, was taken from the table.

Remarks were made by Mr. Hurty in favor of it. An agent would find able and earnest coadjutors. We need three or four agents. He, for one, would give two weeks of his time, and pay his own expenses, as an agent of the Association, if twenty-four other men could be found to do the same.

Mr. Terwilliger, of Anderson, had been in more than fifty counties of the State within the last six months, and had found great interest in nearly all of them in relation to this agency. They were anxious to have such a person among them.

The resolution was unanimously adopted.

Mr. Cole hoped that the Association meant to back up their resolution, and it would be necessary for them to put their hands deep into their pocket in order to carry it out.

Resolution of Mr. Holbrook, of Ohio:

Resolved, That as our profession is the first in its operations on the human mind and first in its power to elevate and sanctify mankind, we will ever maintain its dignity and respectability by our deeds and arguments.

Mr. H. then made the following remarks:

Who among us desires or dares to deny this abstract truth? Who is there that does not ignore it continually? I will state some of the methods on which we practically deny the resolution. We permit ourselves to be examined by men of other professions, or of no profession, and that without remonstrance. What would we think of Doctors, Lawyers, or Ministers, being examined as to their professional ability by teachers? We suffer ourselves to be slighted by the profession. What does it mean that so many use the teacher's position and pay, as a *stepping stone* to some other profession, and that we greet them still as legitimate teachers—as brethren in the good work?

Are we not told by Doctors and Lawyers (some of the smartest of us), that we ought not to be satisfied with teaching as a business? I admire the spirit of the young lady who, having been

examined by a Physician and being counseled to seek some higher profession, replied—"I don't know, Doctor, of any higher profession, but I do know of several lower."

In our county and State Associations, we are in the practice of asking Ministers, Lawyers, and Physicians to address us on the subject of Education. When a body of Physicians or Ministers is known to invite a professional teacher to address them on the duties of their professions, it will be proper for us to return the compliment.

We even suffer a gentleman of another profession to come before us here and taunt us with the statements, that we can not make as much money as doctors, that we do not enjoy as good society, that we never can arrive at any eminence in our profession. Not only so, we give him a vote of thanks for his address. Even suppose these things are all true, is it any discredit to our profession—any reason why we should seek another? Worse things could be said to the Missionary, but should they? and should the Missionary thank his tempter for such statements?

The resolution, after discussion, was adopted.

Resolution of Mr. Sims, of Thorntown:

WHEREAS, The *Indiana School Journal* is an important auxiliary in promoting the cause of Education in our State, and is looked to by the teachers for instruction in the art of Practical Teaching; therefore,

Resolved, That in the opinion of this Association, Practical Teaching should be made a more important feature in that work.

Mr. Hurty said that there was complaint that the *Journal* was not practical enough—too little instruction in teaching.

Mr. Kinnan complained that the Mathematical Department was beyond the reach of nineteen-twentieths of the teachers of the State.

Mr. Terwilliger suggested that articles in reference to the location and architecture of school buildings, and the conducting of Teachers' Institutes and on the best method of teaching, were absolutely necessary and too little attended to.

Mr. Olcott, of Lawrenceburg, said we ought to employ an editor who should make the *Journal* his sole care. It ought to be a periodical of the highest order of literary merit. The present editors had other work to attend to, and while this was the case, the *Journal* could never be what it ought to be.

Mr. Stevens, of Richmond, hoped that the present high standard of the Mathematical Department would not be lowered. He would give five dollars for a *Journal* with a good Mathematical Department, rather than receive it as a gift without it.

Mr. Henkle, Mathematical Editor, said that the problems inserted were such as were sent him. If the teachers preferred less difficult ones, let them send them in. He did not believe the *Journal* ought to contain problems that any school-boy could solve. It ought to meet the wants of our best educated teachers.

The discussion on the *School Journal* was continued with much zeal.

Mr. Stone, resident editor, said the *Journal* belonged to the teachers; it was just what the teachers of the State made it. If articles of any special character were needed, the teachers must furnish them. If its literary character was not what it should be, the teachers of the State were responsible for it. His duties as superintendent of the schools of Indianapolis claimed his time and attention, and with him of course the *Journal* was a secondary affair. He spoke of the prosperity of the *School Journal*, and thought the fact of its having increased its circulation from 500 to nearly 1700 since the semi-annual meeting a year ago, was evidence of its being generally well received throughout the State. He said at least two-thirds of the subscribers were not teachers, and thought the *Journal* should not be strictly professional in its character. The *Journal* had sustained an agent for nearly a year, and its pecuniary success had been greater than that of the *Journal* of any other State.

After a lengthy discussion, the resolution was adopted.

Afternoon Session.

Mr. Bowen offered the following resolution:

That, as the terms of the *School Journal* are one dollar in advance, the executive committee be requested hereafter to make the State Agent responsible for the proceeds of all he obtains.

Adopted.

By Mr. Stone:

That a committee be appointed by the Association to inquire into the educational condition and wants of the colored people.

Adopted.

Committee—J. G. Cravens of College Hill, Lewis Estes of Richmond, and D. H. Roberts of Pendleton.

The following resolutions were offered and severally adopted:

By E. W. Kinnan:

WHEREAS, The Association has expressed the sentiment, that the people must be set aright upon the question of a good Free School System, and that we are dependent upon the generosity and intelligence of a wise Legislature for the establishment of the same—

Resolved, That it is the imperative duty of every teacher and other friend to the cause, who can talk to his neighbors collectively or individually, to spare no effort in impressing every citizen with the great importance of a Free School System; and that we will oppose with unrelenting tenacity, any man for the Legislature, who does not entertain the most liberal views in favor of popular Education.

By I. N. Terwilliger :

Resolved, That we hold the Bible as the best and sublimest of text-books, and approve its use in our Common Schools.

Resolved, That the thanks of this Association are due to Messrs. Hurty and Cole for their efficient labors, as agents of the Association, in advancing the interests of Education in Indiana.

By E. P. Cole :

Resolved, That the thanks of this Association be presented to the Rev. Dr. Monfort, President of Glendale Female College, for his courtesy in yielding to the application of the Executive Committee, for the interesting concert of last evening.

Resolved, That we desire especially to tender our sense of obligation to the fair vocalists, who have charmed us by their sweet melody of song and instrument; that we entertain a very high appreciation of their services, and shall long remember the exquisite pleasure they have permitted us to enjoy.

By S. T. Bowen :

Resolved, That, in the opinion of this Association, three examiners should be appointed for each county, constituting an Examining Board, who should hold stated meetings for the examination of teachers, and that the signature of at least two should be necessary to constitute a valid certificate.

By Mrs. Lentz :

Resolved, That we, the teachers of the State of Ohio, return our sincere thanks to the citizens of the city of Richmond, for their kindness extended to us while attending the Indiana State Teachers' Association.

By J. G. Wilson :

Resolved, That we welcome the reform of Female Medical Education as a great instrumentality in regenerating the human family, by diminishing the multiplied physical ills of woman, and, we would add, thus prevent the final extermination of our race.

By Mrs. Drs. Thomas :

Resolved, That the citizens of Richmond tender their thanks to the members of the State Teachers' Association for meeting in our city; and we cordially tender the Association our hospitalities, whenever it may suit their convenience to meet with us again.

By Mr. Phelps :

Resolved, That the thanks of this Association be presented to the editors of the *Indiana School Journal*, for their able discharge of the duties of their position.

By Mr. Vawter :

Resolved, That the thanks of this Association are tendered to H. B. Wilson, for his very efficient services, in securing free return tickets over the several Railroads in the State to the members of this body.

By H. B. Wilson :

Resolved, That the thanks of this Association are tendered to the several Railroad Companies in this State, who have so generously responded to the petition of the teachers of Indiana, and who have consented to return the members of this Association to their homes, free, over their respective roads.

Resolved, That the Corresponding Secretary be directed to forward a copy of this resolution to the President of each of these roads.

By Mr. Vawter :

Resolved, That the thanks of this Association be tendered to the citizens of Richmond, for the generous and liberal hospitality which they have extended to the members of this body during the present session.

The Convention then adjourned, to meet at Indianapolis, in September next.

This was the largest meeting of teachers ever held in the State: not less than four hundred teachers and educational men were assembled. Friends from Ohio were present, and participated in the discussions.

There was a very general failure in regard to the lecturers who were expected. President Edwards, Hon. O. P. Morton, Prof. G. A. Chase, Mr. E. E. Edwards, and Miss Belinda Yocum, were absent, which caused considerable disappointment to all; still the Association found enough to do, and the discussions were never lacking in interest.

In the evening the members of the Association were invited to a festival offered them by the citizens of Richmond.

☞ The results of the labor of more than 1,000 men, continuously employed upon the Great Eastern, are showing themselves more evidently every day. The arrangements for launching her are rapidly progressing, and it is expected that this important event will take place during October.

☞ An excellent turn was made a few days since, at dinner table, by Judge Hoar, of Massachusetts. A gentleman remarked that —, who used to be given to sharp practice, was getting more circumspect! "Yes," replied Hoar, "he has reached the superlative of life—he began by seeking to *get on*—then he sought *honor*, and now he is trying to get *honest*."

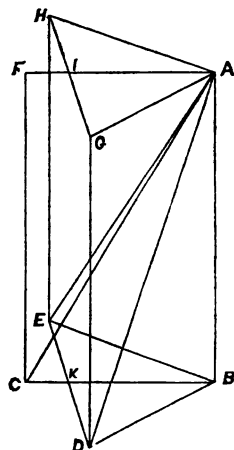
MATHEMATICAL DEPARTMENT.

W. D. HENKLE, Editor.

SOLUTION OF No. 43.—BY SAMUEL ALSOP.

Let AB represent the steeple; AD, AC, and AE, the directions of the forces. Then we shall have $EAC = CAD = 30^\circ$ $BAD = BAC = BAE = 40^\circ$.

We may determine the effect of these forces in several ways. Two of the most simple, are to find the resultant of AD and AE, which is $= 2AK$, and then resolve the two, AC and $2AK$, into two others in directions AF and AB. The first of these last results must equal 500; or we may resolve each force separately, and sum the results. I choose the latter method.



AD is equivalent to AG, horizontal, and AB, vertical.

AE is equivalent to AH, horizontal, and AB, vertical.

AC is equivalent to AF, horizontal, and AB, vertical.

Of these, the only effective forces are AF, AG, and AH.

The resultant of these is $AF + 2AI$.

Let $AC = x$. Then $AF = AG = AH = x \sin. 40^\circ$.

Find CD; and we shall have $CD = 2CB \sin. \frac{1}{2} CBD = 2x \sin. 40^\circ \sin. \frac{1}{2} CBD$; and $CD = 2CA \sin. \frac{1}{2} CAD = 2x \sin. 15^\circ$; whence,
 $x \sin. 40^\circ \sin. \frac{1}{2} CBD = x \sin. 15^\circ$; or $\sin. \frac{1}{2} CBD = \frac{\sin. 15^\circ}{\sin. 40^\circ}$

and $CBD = 47^\circ 29' 16''$.

$AI = AG \cos. GAI = x \sin. 40^\circ \cos. 47^\circ 29' 16''$;

whence $2x \sin. 40^\circ \cos. 47^\circ 29' 16'' + x \sin. 40^\circ = 500$.

and $x = \frac{500}{\sin. 40(1 + 2 \cos. 47^\circ 29' 16'')} = 330.77$ pounds, the force required (errors excepted).

Prof. Olmstead says, "This question requires no solution in different planes." The slightest study of the position of the lines of the forces, will convince any one that *they* are not in the same

plane; they, therefore, can not be resolved as though they were. Olmstead's method is to find the resultant of the three as though they were in the same plane, and diminish the resultant in the ratio of rad. to sin. 40° . Now this supposes the line EKD in my figure to pass through C, which it can not do, unless AD and AE make an angle of more than 40° with the axis of the steeple.

No. 34.

Prof. ROBINSON's solution of this problem has been justly criticized by several correspondents. Mr. Staff says, "If such a value of y can be found as would make the factors a^2+ay+y^2 and $a-y$ respectively $-f^5$ and f , or f^7 and f^2 , etc., then would $a^3-y^3 = -f^6$ or f^9 , &c., be a cube. The impossibility of finding such value was not embraced in Mr. Robinson's demonstration. It is not only the product of two cube numbers, or that of a number by its square that will produce a cube; it may be 'otherwise,' e. g. $32 \times 2 = 64$, and in many other ways." Judge Clark writes, "Is not Professor Robinson mistaken in his assumption that if the product of two factors is a cube, each one must be a cube, or the one must be equal to the square root of the other? The products of such factors will always be cubes; but *non sequitur* that no other factors will produce cubes. 2×32 is a cube; but neither 2 nor 32 is a cube, nor is either factor the square root of the other. The truth is, the number of pairs of factors that will produce any given cube (unless we require the factors to be whole numbers) is *infinite*. Of course, I venture no opinion as to the correctness of the conclusion of Prof. Robinson as to the impossibility of solving No. 34. That subject I have not investigated. All I have to say is, that if his conclusion is correct, it is so for some other reason than that given by him."

Mr. Alsop writes, "Prof. Robinson's solution is false. It merely proves that a^3-y^3 is not a *cubic form*, and in no way establishes the fact that it does not admit of cubic values. His plan of proof would equally well establish the proposition that $\sqrt{x^2-a^2}$ is impossible, whereas we know it will admit of an infinite number of solutions."

No. 40.

Staff says, "In my solution to 40, mean radius is rather meant." No matter which, logically.

Mr. Alsop writes, "The problem is not sufficiently definite. Formulæ may be constructed depending either on the true or the geocentric zenith. It would be necessary to have the rule to determine whether the plan proposed had been properly carried out."

No. 44.

S. Crowe, Craig and Snoddy, K. Wharry, and Judge Clark, get $\frac{1}{2}$ and $\frac{1}{10}$ for the required fractions. W. P. T. B., $\frac{4}{3}$ and $\frac{1}{3}$, and Samuel Alsop says, "It admits a great variety of solutions."

Mr. Staff puts s for the sum of the numerators, D their difference, and d the difference of the denominators, and arrives at the equation $s^2 + 4d = 5dD$. He says "To secure whole numbers for all the terms, take s and d , both odd or both even multiples of the co-efficient 5, and s greater than d . If $s=15$ and $d=5$, $D=13$, and the fractions are $\frac{1}{5}$ and $\frac{1}{13}$."

SOLUTION OF No. 45.—BY W. B. MORGAN.

Let C be the center, and P the given point. Then with C as a center and radius=CP, describe a circle, and from P, apply in the circle described, a chord=the given difference. This chord, produced each way to the circumference of the given circle, will be the line required.

[This solution is, perhaps, the simplest possible. G. D. Hunt solved it the same way; other solutions, more complicated, were sent by Willard, Clark, Staff, and Alsop.]

SOLUTION OF No. 46.—BY THE EDITOR.

The segment is $\frac{4}{25}$ of the area of the circle. Taking, then, a circle whose diameter is unity, we get .1256636 for the area of a segment of it, which is $\frac{4}{25}$ of its whole area. By looking on p. 87, of *Knapen's Mechanic's Assistant*, we find from the "Table of the Areas of the Segments of a Circle whose diameter is Unity," that the height of this segment is .217; whence the chord is easily found to be .824; which multiplied by 877.6, the number of yards in the diameter of the given circle, gives 723.1424 yards for the length of the required chord.

[Staff gives for the result, 32.9115 chains, that is, 724.053 yards; and Craig and Snoddy, 723.56+ yards. Which result is the most accurate, we have not taken the trouble to ascertain. W. P. T. B. gives 780.4+ yards, and Alsop says this problem can only be solved by approximation.]

No. 47.

[This has been solved by *W. P. T. B., Willard, Hunt, Craig and Snoddy, Alsop, Pool, and Judge Clark.*]

No. 48.

[*Hunt, Alsop, W. P. T. B., and Judge Clark* give, as the result, $\frac{5}{12}$ and $\frac{7}{12}$; *Craig and Snoddy*, $\frac{23}{48}$ and $\frac{5}{24}$. The answer in *Mann and Chase's Arithmetic* is $\frac{31}{72}$ and $\frac{41}{72}$, and the following rule is there given :

"Square the number of swaths in the side of the field for a denominator. Then, if the number of swaths is odd, multiply it by 2, and diminish the product by 1; or, if it is even, multiply it by 2, and diminish the product by 4, for a numerator. The fraction thus obtained will show what part of the field the outer man will mow more than the inner one." Is this correct?]

ACKNOWLEDGMENTS.—*Samuel Alsop* has solved A, B, C, D, E, and F. He solves No. 39 by the intersection of two ellipses.]

PROBLEM No. 52 —BY JUDGE CLARK.

What is the length of a cylindrical beam, which, when placed on end, and raised perpendicularly till the upper end is 30 feet from the ground, and then let fall, will have the greatest possible momentum on reaching the ground?

PROBLEM J.—BY R. W. M'FARLAND.

If the moon revolves round the earth in 27 days, 7 hours, 43 minutes, 3 seconds, required the quantity of matter to be added to the earth so that the time may be only 27 days.

The last number of the *North American Review* contains an article on "The Imagination in Mathematics."

Mr. ALSOP is now engaged in correcting the proof of a work on Surveying. We shall look for it with interest, knowing that Mr. Alsop is fully competent to produce a very creditable book on this subject.

The 44th planetoid was discovered by Herman Goldschmidt, of Paris, on the night of May 27. This is the sixth discovered by him. The 43d, discovered by Mr. Podgson, at the Redcliffe Observatory, has been named Ariadne.

EDITORIAL MISCELLANY.

THE OPENING OF THE PUBLIC SCHOOLS.

The Public Schools in Indianapolis, New Albany, Lafayette, Evansville, Richmond, Ft. Wayne, Shelbyville, and many other places, have re-opened. Terre Haute, among the largest places in the State, presents the least hopeful prospects in regard to public education. The short-sighted policy which has marked the course of this city in regard to schools, does and will continue to affect unfavorably her prosperity. At this day a city of eight or ten thousand inhabitants, without public spirit enough to support free schools, has little prospect of growth or pecuniary prosperity.

Madison, too, once the pioneer city in the State in the Free School cause, has, for the past two years, pursued so illiberal a policy, that she has literally starved out her schools. Her former fine High School was gradually reduced to the grade of a Grammar School; the appropriations were reduced, until finally last spring the schools stopped. Whether they have been re-opened this fall we have not learned, but until a more liberal course is adopted, the schools will be of little service.

Michigan City re-opens her schools the first of October. The schools here ought to be permanent. The Intermittent policy is a bad one.

In what we said in the July number of the *Journal* of the schools of New Albany, we did that city injustice. We learn from the present Superintendent that the temporary suspension of the schools was the result of a mistake. It was supposed that there were funds enough to continue the schools till the close of the year, and \$3000 were applied to the payment of the School Building debt. There is no disposition, so we are informed, to cripple or in any way impair the usefulness or efficiency of the Public Schools.

TO SUBSCRIBERS.—We inclose bills to those of our subscribers whose terms of subscription expire with the present number. We hope none will discontinue. Please remit your dollar as soon as possible. We need all our funds.

We are often asked whether we can supply back numbers. We can not, farther back than the beginning of the half year (the July number). If any persons have copies of the April number, which they can spare, they will confer a favor by sending them to the Resident Editor. There are two or three subscribers who are anxious to make their volume complete and have not that number.

TOWNSHIP AND CITY TRUSTEES, and all having charge of school buildings:—We call your attention to the advertisement of Mr. DAVID MUNSON. His Lightning Rod has received the approval of a committee of Scientific men, at the late National Fair, and took the first premium there.

PERSONAL.

We understand that Mr. HURTY, late Agent of the State Association, has purchased grounds and a building, at Liberty, Union County, for the purpose of establishing a private school at that place. Mr. Hurty has been prominently connected with schools for a long time, both in Ohio and Indiana.

W. T. WEBSTER, of the High School at Lewiston, Maine, has taken charge of the High School at Indianapolis.

Rev. ROBERT ALLYN, Commissioner of Public Schools, R. I., has resigned that office, and has been elected Professor of Languages in the Ohio University at Athens, Ohio.

W. D. HENKLE, late of Greenmount College, has become Superintendent of Public Schools, Richmond, Ind.

Rev. JAS. G. MAY, recently Principal of one of the Grammar Schools of New Albany, has been appointed Superintendent of Schools in that City, in place of Chas. Barnes, resigned.

Mr. RICHARD EDWARDS, of the Salem Normal School, Mass., has been appointed Principal of the St. Louis Normal School.

GEO. A. SIMONSON has been appointed Principal of the First Ward Grammar School of Indianapolis.

The State of Michigan has established a College of Agriculture, on a farm of seven hundred fertile acres, near the new City of Lansing, where the State Capitol is located. Joseph R. Williams, late Editor of *The Toledo Blade*, is President. It has an endowment of \$56,000, the proceeds of the Salt Spring lands originally donated to Michigan Territory by the Federal Government. The Legislature has appropriated \$20,000 per annum for two years to the support of the College. There are already accommodations for eighty students. No charge is now made for tuition, but each student is required to work three hours per day, for which he is paid. This we believe will be the first State Agricultural College actually in operation in America, but Pennsylvania and New York are preparing to follow. The Michigan College will be dedicated on the 13th instant.

LIVERPOOL AND CHICAGO.—It is stated in exchange that a bark of 390 tons burthen, named the *C. J. Kershaw*, capable of taking 16,000 bushels of grain, and intended as the first of a line to run from Chicago to Liverpool, was launched at Chicago on July 4th.

Last month a ship, the *Madeira Pet*, was reported as having arrived at Chicago from Liverpool direct, being the first vessel ever sent from England to Chicago. She was laden with a cargo of crockery, hardware, oils, paints, &c.

BOOK NOTICES.

OUT AT LAST—The Common School Geography, by D. M. Warren. Among the many things which crowd upon us at the re-opening of the schools, we have not time to examine this work carefully. The success of all the Geographical works hitherto published by H. COWPERTHWAIT & Co., is a guaranty for the excellence of this recent one from their press. The work is executed in good style. The maps are well colored and sufficiently full, and the lettering very distinct. It is a quarto of one hundred pages, and contains twenty four maps, including commercial maps of the United States and of the World; also, a treatise on map drawing, a pronouncing vocabulary, and statistical tables.

. FROM FARMER, BRACE & Co., New York, we have received copies of Brockelsby's Astronomy and Hooker's Physiology, which we shall notice as soon as we have time to examine them.

BARNES & Co. have now issued the third volume of their Series of Readers. The remaining numbers will be out by the first of January or before. It is a first rate series thus far.

WINTHROP B. SMITH & Co. have issued a revised edition of the Eclectic Series. We should be glad to see the old Indiana Series thrown out, and this edition of the "Eclectic" substituted for it. One valuable feature in the Sixth or Highest Reader is a short biographical sketch of the author of each piece.

The following came into our hands a few days since. We will vouch for its genuineness. The author, a teacher in Monroe county, contracts with his patrons, after the following style, *verbatim et literatim et punctuatim* :

August the 17nth 1857

I Do A gree to teach three monts School Sch as Spelling and writing and Reading and first part of the Rethmetict as I think that ther will not Bee any Schollars that will nead any thing els and also Geography

Wea thea Sub Sribers

* * *

NOTICE.—"One Hundred Dollar Prize"—See the advertisement of MASON BROTHERS.

NORMAL SCHOOLS.—We have received the following prospectus of the Normal School at Lebanon, Ohio. Our own State can not yet boast a Normal School, and our teachers who would learn to teach, must go to the Normal Schools of other States. Among the most flourishing of these is the one at Lebanon, under the care of ——— Holbrook as Principal

THE
Indiana School Journal.

VOL. II. INDIANAPOLIS, OCT., 1857. NO. 10.

INDIANA: HER EDUCATIONAL CONDITION AND
PROSPECTS.

A Report read before the State Teachers' Association of Indiana, at its Second Semi-Annual Meeting in Richmond, on Wednesday, the 26th of August, 1857; by E. P. COLE.

To describe the educational condition of Indiana, and the prospects inferable from that condition, is by no means an agreeable task; and one from which the native or the adopted citizen, jealous of the reputation of the State, might well be tempted to shrink. It is not pleasant to lay bare the ulcerous wound and probe the gangrened sore. Feelings of State pride, an unwillingness to have the true state of affairs go abroad, naturally prompt to a concealment of the disagreeable facts. Still, if the State is educationally diseased, and if that cancerous sore is spreading itself, extending its fatal fibers until they endanger vital parts of the system, it is most certainly better that they be known; that the disease be investigated, its cause ascertained, and the remedy pointed out; unless, indeed, we have arrived at the conclusion that the disease is incurable, and that all we have to do is to fold our arms and, as patiently as we can, await the undesirable issue.

The person who attends our College Commencements, and who meets the intellectual crowds then and there assembled, or who resides in our larger towns and cities, where he has an opportunity to witness the better phases of our school-system, is but poorly qualified to judge of the merits of the whole. He must travel

over the State and enter, especially, the rural districts. Then, and then only, will he be ready and prepared to appreciate our true educational condition and wants. For the want of this close inspection, this acquaintance with the extremities of the system, many friends of education, zealous and hopeful, are praising us for what they term the unparalleled advance Indiana is making in popular intelligence, and even in prominent piety. As the deep religious feeling of our State is not the subject assigned us, we shall not descend upon it; merely observing, while passing, that, like our sister states, our profuse piety has never yet inflicted upon us any very serious injury. But in regard to the intellectual part, we expect to show, that the opinion that our State is distinguished for her educational efforts is not in exact accordance with the facts in the case; and we propose letting these facts speak for themselves.

There is very much in the position, history, resources, and progress of Indiana of which she may well boast, and which may, legitimately, call up feelings of honest exultation in the breasts of all claiming the protection of her laws, and owning her as their home.

Her position, geographically and commercially, is by no means an inferior one. Her soil, in variety and quality, and in its adaptation to produce what tends to the comfort and wealth of her citizens, is surpassed by very few of her sister states. A benign Providence has poured out upon her, in profuse abundance, inexhaustible stores of agricultural and mineral wealth, sufficient to support and enrich teeming millions. The rugged hills in her southern parts abound in sand-stone, lime-stone, and marble, scarce surpassed for building purposes. Her rich and exhaustless veins of iron ore, and her beds of superior bituminous coal, are other evidences of the elements of her wealth. Her dense forests in the interior, in the north and west her broad prairies of surpassing fertility, stretching away in boundless magnificence and beauty, and interspersed with charming lakelets, mirroring in their transparent depths much that is beautiful and attractive to the eye—all proclaim that Indiana has had her portion dealt out to her with no niggardly hand; that she has, in a very large degree, elements to make her a great and glorious State—a peer among the proudest, the noblest of this confederacy.

In her progress there is also much to encourage and delight. Her dense forests are gradually disappearing before the heavy

swing of the woodman's ax. The hut of the hardy and toil-worn pioneer has yielded to the comfortable dwelling of the farmer, or to the palace of the millionaire. Cities and towns have sprung up as if by magic. Railroads, like a vast net work, cover her surface, and the shrill neigh of the iron horse wakes the echoes of her hills and valleys.

Such is Indiana physically, if we may use the expression. But, as her true greatness and glory depend not alone upon these elements, but rather upon the intellectual and moral character of her citizens, let us examine and see, if possible, how far she has fallen short of the measure of her duty in this respect. And here we must prepare ourselves to look upon a picture far, very far from creditable to the character of our State, and deeply wounding every feeling of State pride. The truth is, that while Indiana has been busying herself in an attempt to build up herself by mere physical appliances, as it were, she has proved recreant to her true interests, and neglected to build her greatness upon the right foundation—the thorough training of her youth. In this respect she has pursued the opposite of the course adopted by Massachusetts. *She* began with the intellectual and moral element of her character, rightly judging, that the merely physical elements of her greatness would naturally follow as the result of mind, educated mind, upon mere senseless matter. Unfortunately, Indiana has, to a large degree, reversed this course; and, as the inevitable consequence, she does not, to-day, stand as high, even *physically*, as she might have done.

But let us descend to particulars to prove our position, and to present the matter in a light clear and unmistakable.

In the language of one of Indiana's most intelligent and most zealous educators, "Our legislation upon the subject of education, hitherto, has not been of that liberal and far-seeing character which the old Constitution authorized; and some of the legitimate fruits of lack of wisdom and independence in this matter are now seen in the recent census. It has been our misfortune, that too many of those who have occupied our legislative halls, have attached more importance to the development of our physical resources, and to the construction of commercial channels, than to the cultivation of the minds and hearts of our youth. The result, in the case of some of the counties below zero in 1840, as exhibited by the census of 1850, compared with a similar statistical view derived from the census of 1840, will show the kind of intellectual

progress we have made in ten years. In 1840 we were at the lowest point of depression as a state among the free members of this confederacy. But our educational zero has sunk about two degrees, and the number of counties below that dismal point has increased more than fifty per cent. during this period of ten years. Would this have been the result had we directed our attention and means to the establishment of a wise and efficient system of *free schools*? Had we taxed ourselves as freely for their support and adopted as generous a policy for their improvement as they deserve, should we now have had the humiliating fact staring us in the face, that the number of our adult population unable to read or write has increased from 38,100 to 75,017 within the last ten years? It would probably surprise some of the members of the legislature to learn that the number of their constituents over the age of twenty years unable to read or write increased *more than one hundred per cent.* during the decade between the years 1840 and 1850, while the aggregate increase of their constituency did not reach *fifty per cent.* during the same period. The census of 1840 on the subject of adult ignorance was, undoubtedly, very imperfect. Astounding as were its disclosures, we are now compelled to admit, that even then we were in a worse condition than the census of that year showed us to be. It seems that the inaccuracies were in our favor, and that it did not reveal the actual state of adult ignorance, but cast a partial vail over our literary poverty. Five counties, in 1840, were not represented on this point. In 1850, these same counties contained an aggregate of 3,509 adults unable to read or write. Of these, Morgan had 1,362, and Posey 1,469. Monroe was reported, in 1840, as containing *nine persons* unable to read or write, while the census of 1850 stated the number of that class to be 1,000. It surely can not be very gratifying to find, on comparing the statistics of adult ignorance of 1840 and 1850, that most of the counties below zero in 1840, have sunk still lower. A few instances will be sufficient to corroborate the statement. Ripley, in 1840, contained 208 unable to read or write. In 1850, the number had increased to 2,075; with an aggregate population at these periods as follows: in 1840, 10,392, and in 1850, 14,822. Putnam had, in 1840, 1,021, and by the census of 1850 the number had increased to 2,134. Fountain, with 874 in 1840, finds herself reported in 1850 as containing 1,457 adults unable to read or write. Hendricks, with 924 in 1840, increased to 1,333 in 1850. Green's retrocession in the scale is indicated by the figures 740 in 1840,

and 1,515 in 1850. Davis had, in 1840, 667; in 1850 the number had swelled to 1,173. Owen, with 793 in 1840, had 1,126 in 1850. Scott, with 470 in 1840, had, in 1850, increased her rank and file to 900, with a general increase of less than forty per cent. Her literary retrocession had been almost *one hundred per cent.* Martin, which in 1840 could only muster 620 adults unable to read or write, which was only three less than one-half of that popular class of her population. in 1850 could parade a regiment of 1,113 strong, which shows that she had receded even from her former forlorn condition.

"Are not such facts significant of the need of the school-master to be abroad in the commonwealth? Do not these figures look like ignorance perpetuating itself? Is not such a state of things enough to make every citizen of Indiana blush to find that only a fraction more than four-fifths of the adults in the commonwealth can read God's Word or write their names? Her literary zero, or general average of adult ignorance in 1840, was *one-seventh*, which placed her *sixteenth* in the scale of the then twenty-six states; but in 1850 we see a deplorable retrocession to the rank of the *twenty-third*—actually lower than all the slave states in that list but three."

Dark and discouraging as these facts may appear, we must not forget that they represent a state of things which existed from six to sixteen years since; and that if there has been the same increase of ignorance *since* 1850, that there was during the decade immediately preceding it, we are in a condition still more deplorable.

It would not have been a difficult problem, from the data before us, to have ascertained the increase, if any, of ignorance in the State; but, like the man upon the verge of bankruptcy, who fears to make a careful examination of his ledger, lest it may too surely realize his gloomy anticipations, so we shrink from the calculation, being afraid to face the result.

Seventy-five thousand adults in the State who can not read or write! Can the patriot look upon this state of things and not feel pained to the heart, when he reflects upon the myriad evils almost certain to result from such a degree of ignorance? Can the honest citizen, when he deposits his vote, think of it and not feel how great is his responsibility to vote for the legislator who is willing and anxious to wipe out the foul dishonor from our escutcheon? Can the honest legislator think of it, when he, for a moment, hesi-

tates to vote for measures having for their end and aim the intellectual and moral elevation of the people of this State?

Taking one-half of the above 75,000 as voters, and the matter assumes a new and more fearful phase. Think of it: thirty-seven thousand men in our State, with like passions with ourselves, upon whose natural depravity is superinduced all that dark ignorance and an unenlightened prejudice can effect, enjoying all the rights of freemen, with voices potent for weal or woe, and actually unable to even read the names upon their ballots; and yet these men, with all their ignorance and prejudice, and consequently with all their narrow and selfish views upon all the great questions involving the dearest rights of her citizens, as well as the honor and reputation of the State itself, have precisely as much power, as much influence in molding the destinies of this great commonwealth, as thirty-seven thousand of the most intelligent and most virtuous citizens in it have. Thirty-seven thousand voters!—responsible men—who can not read or write! What materials for mobs, or for organized resistance to our laws generally! What plastic materials in the hands of base, unprincipled politicians, who are seeking place and power regardless of the means employed to compass their ends. Is it now any wonder that our State has for the last few years been so sadly rent by contending political parties; that so many of our public men have forgotten the interest of the State at large, or, supremely selfish, have utterly sunk those interests in their efforts at personal aggrandizement? Is it strange that there should be so many fierce criminations and recriminations of elections secured by fraud—of perjured voters and imported votes—of stuffed ballot boxes, and the whole long, dark catalogue of political chicanery and crime? Is it strange that the honest and virtuous of all parties, in so many cases, shrink from the perils and foulness of candidacy for office; and that the dissolute, the profane, and the inebriate so often succeed in mounting the topmost wave of popular favor, and wield our destinies? Indiana has truly “sowed the wind, and she must expect to reap the whirlwind.” Aye, is she not *already* gathering in the first fruits of that terrible whirlwind-harvest?

Let us once more repeat the strength of this grand army of thirty-seven thousand; and ask ourselves whether its numbers are sensibly diminishing, or whether there are not numerous recruits rapidly filling up its ranks as fast or even faster than the toil-worn, war-worn veterans are discharged.

During the last year there were reported to the Department of Instruction 458,351 children between the ages of 5 and 21. Also there were attending the public free schools during the same time 195,976, leaving a balance not in the free schools of 262,375.

There were in attendance upon our colleges during the last year about 700 students. In this we omit all mention of those useless and inefficient appendages, miscalled normal schools, and model schools, reckoning only those properly belonging to the institution. Miami University, our nearest neighboring College, had, last year, 15 students from Indiana. Double this number, which we think will be amply sufficient to represent all others attending other colleges out of the State. Estimate 150 as the number attending female seminaries out of the State. Assume 10,000, a very large estimate, for the number of those attending the various private schools and seminaries in the State. To these add 500, another large estimate, for those whom we have abstracted from the various model and normal—or more properly abnormal—schools, and see the result. They make, in the aggregate, 11,380; subtract this from the balance just named, and there are still 250,995 represented as not having attended school at all during the last year. Cast away the 995, for the sake of dealing in round numbers, and the fearful, sickening fact still stares us in the face, that 250,000 have received, during the last year, none of that training designed to prepare them for assuming the responsibilities of manhood and citizenship. So it appears that there are 250,000 young recruits preparing for vacancies in the ranks of the grand army of ignorance. May not those who make capital out of the ignorance of their fellow-citizens shout their infernal peans, that there are still many harvests in store for them? And may not and *should* not the educator, the true friend of this State and her interests, feel that there is additional motive for a redoubling of his energy and his efforts?

We have heard these facts met with the assertion that the census can not be relied upon, and that we are not near so ignorant as we are represented to be. This is merely an assertion without proof, or any show of it; and yet these same persons place full faith and credit in the statements of the census in all other matters. Again, it is claimed, that a large number of these 75,000 was born in other states, and that their ignorance emigrated with them. This might be put in as a bar in arrest of judgment, if it affected for the better the state of educational feeling in Indiana

We have all the blame to bear and all the odium to sustain ; and, what is worse, suffer all the concomitant evils in the case. One of the evils resulting principally, if not entirely, from this low state of education, is opposition to our free school system, and an opposition, too, as persistent as it is violent. It is from this class of persons that we frequently hear language like the following : "We have lived to old age and made money, too, without any of this book learning, whose only tendency is to make scoundrels of men, and wishing to shield our children from all such malign influences, we intend that they, too, shall grow up, as their parents before them, ignorant of the villainies superinduced by the district school." But the 75,000 must by no means bear all the blame of an opposition to our school system. This opposition has its representatives among all classes of our population, and the motives are almost as various as are the opposers ; but various as are the motives, they are unsanctified by a single generous, patriotic, or intelligent feeling.

A discouraging feature in this feeling of bitter hostility to the cause of education is, that as it did not spring up in a single day, so it is not destined to go out very soon. It had its origin coeval with the first efforts in Indiana to provide a system of general instruction for the youth of the State. It is persistent, too, and in many parts seems to keep pace with educational effort.

For some years previous to the adoption of the new Constitution, a law was passed authorizing counties to establish, by vote, free schools in their boundaries ; and to support them, a tax of 10 cents on the hundred dollars was to be levied. This was considered quite an advance upon the old system, and, accordingly, several counties availed themselves of the opportunity to increase their educational facilities. But in many other parts of the State the opposition was violent and even acrimonious. One county, in particular, pluming itself upon its position and importance in the State, gave, for two years, an annual majority of more than 1,900 against the establishment of free schools within her boundaries. The third year, by some political or other management—for the after acts of the same county prove that there could have been no sound conversion in the premises—the majority was turned upon the other side, in favor of free schools. There arose a new difficulty—one not anticipated. The law operated like a fish basket ; it was easy to float into it, but there was no provision for getting out. The law provided that any county might vote itself into a system of free

schools, but unluckily, there was no clause permitting them to vote themselves out, when tired of the affair. But while the citizens of this county were lamenting their sad fate as silly suckers, who had foolishly suffered themselves to be wheedled into this specious but treacherous trap, the new Constitution was inaugurated; and sweeping away all old enactments, engrafted free schools upon the organic law of the State. But this county did not forget her opposition to free schools. She was among the first to resist the collection of taxes for the support of these schools; and taking advantage of an informality in a part of the new school law, successfully invoked the aid of the Supreme Court in their behalf. Last year she sent two representatives to the Legislature, both of whom were enemies of free schools, and recorded their votes against all measures for their improvement. Who, after this, will doubt the truth of the legal aphorism, "that corporations have no souls?"

The county just quoted stands not alone in her opposition to free schools. The same feeling, the same determined resistance is found in too many parts of the State, and manifests itself upon all fitting occasions. We speak now not alone of the newer and more uncultivated portions of the State, nor even the "*Pocket*," that so-called land of darkness; but of those parts claiming a large share of refinement and intelligence.

It is seven years since free graded schools were established in this State, and yet how slow their progress, and how unstable their condition. And though in their excellences and in their complete adaptation to all the educational wants of our people, they far exceeded the anticipations of their founders and their friends, yet there has always been opposition enough to them, either to destroy them, or, at least, to encumber them in their operations. There are not more than three cities in our State where the question of these schools seems to be settled in the affirmative. There are always men who prefer the exclusiveness of private schools, in which the nobility of their children shall not be tainted by contact with the vulgar crowd attendant upon the free schools. Others resist on account of the tax; having no children of their own, they ignore their relation to the common brotherhood of man, and, in the language of their great exemplar, exclaim, "am I my brother's keeper?" Corporations forget, *purposely*, too, to provide the necessary tax, and the school, after having diffused for a while a sound and virtuous education, and convinced the people of its superior excellence, is mercilessly garroted. These are a few of the ways in which the

people of the State are excluded from a needed blessing. We conceive the question of graded schools in this State still an unsolved problem; and if proof is demanded, reference is made to Rushville, Terre Haute, Franklin, Madison, New Albany, and Richmond.

There has not, we believe, been a single session of our Legislature since the adoption of the new Constitution, during which a bitter hostility to our school system has not manifested itself. At two several sessions strenuous efforts were made to abolish the office of Superintendent of Public Instruction; and on both occasions, the members making the same were so ignorant of the Constitution, whose interests they had sworn to subserve, that they did not know that the abolition of the office could not be effected by the Legislature, being constitutionally provided for. Thwarted at this point, another tack was taken, and an effort made to virtually accomplish the same end by so reducing the salary that a perpetual vacancy would be insured. It was only at the last session that a motion was made to postpone indefinitely the operation of the school law. And all efforts to improve that law, and make it more efficient, was steadily and persistently rejected. These facts do not redound much, we admit, to the credit of those seeking to legislate for the imperishable interests of a great and growing State.

Thus it is, that many of the men, whom we look up to as our leaders, and in whose care we repose interests involving the well being of our children, and also the reputation of the State itself, prove recreant to these interests, and traitors to those whose servants they profess to be. One of our public men, who has had, at times, high honors of the State conferred upon him, declared, less than a year since, that "he sincerely wished every cent of the school fund was sunk;" and, on a late occasion, breathed the warm wish that every "college in the State would take fire and burn up." Well, if this is not the "*rabies perabunda*," we confess ourselves utterly unable to furnish an appropriate example.

During the Revolution in 1745, when the House of Stuart made its last attempt to regain the English throne, an order was issued commanding all the Scottish ministry to pray publicly for the Chevalier. A Presbyterian minister, sorely beset by the provisions of this Jacobite decree, his conscience revolting against the measure, still not daring to disobey, relieved himself by the following prayer: "Oh Lord, we beseech thee, be merciful to our young prince, Charles, and though he is only seeking an earthly crown, do thou take him to thyself, and give him an heavenly one." If

there was the least probability of the answering of such a prayer in behalf of some of our political leaders, who are willing to promote their own elevation, even at the expense of the educational interests of the State, how fervent would be the supplications of the friends of the cause.

To this class of public men, there are exceptions highly honorable; men who have proved their devotion to the public weal by exerting themselves manfully to promote the whole interest of their constituents. Were it not invidious, we would name one of them, who has been prominently the friend of free schools; who, in the Constitutional Convention, and in the Legislature and out of it too, on various occasions, has always had his eye single to the educational interests of the State; and when others have flagged and faltered, through weariness and opposition, he has risen above all discouragements and obstructions, and has never given up the contest. Indiana owes more of whatever she enjoys of an educational nature to him than to any other statesman. May the benedictions of her youth long descend upon his head.

In many parts, the school tax is considered a "burden grievous to be borne," though in nearly all the cases the burdened citizen does not know precisely the weight of the aforesaid burden. We have personally conversed with men of reputed intelligence, who were loud in their complaints of the inequality and oppression of the school tax, and who really did not know the exact amount that they were paying. And when we have showed them, from data furnished by themselves, that they were only paying for the support of free schools from one to five dollars per year, and at the same time were sending from three to five scholars to school, they were silenced but not convinced. They had contracted a dislike for the school system, and were not to be argued out of their opposition. Like the witness who, through mistake, had testified that the horse was 16 feet instead of 16 hands high, they were determined to "stick to it."

It is a singular and suggestive fact, that many of our citizens rest with comparative quiet and ease under the burden imposed by an unfortunate public debt; and the only tax of which they complain, and which they anxiously desire to have removed, is the exceedingly light one of ten cents on the hundred dollars.

In many parts of the State men have expressed to us, personally, their opposition to a general system of free schools; and, after giving what they termed substantial and weighty reasons for their

opposition, have ended by saying that they would rejoice in an opportunity to vote down the whole accursed scheme. This opposition is as strange as it is true and as various as both. While in some places we have found men of very small families and large property oppose a school tax, in others we have seen the whole thing reversed, and the rich and childless asking to be taxed for the support of schools, and refused the privilege by the poor, who were in the majority.

We may here be asked whether we suppose that a majority of the people of this State are at heart opposed to a system of free schools. We answer, unhesitatingly, no. Could the whole subject be presented to them separated from politics, and unembarrassed by the false statements and perversions of low demagogues, we are firmly of the opinion that the system would be fully sustained.

(*Concluded in next Number.*)

THE PUBLIC SCHOOLS OF INDIANAPOLIS.

We have inserted the following article at the request of the writer, not because we desire to give any prominence to the schools of this city, much less to our own connection with them; but because we have been frequently requested by visitors from other places to give, in the *School Journal*, the system and grading of the schools of this city, and having frequently received letters asking for similar information.

We have taken the liberty to omit certain portions, personal to ourself, for which the writer will please excuse us.—Ed.

Having had frequent opportunities, during the past year, of visiting these schools, and attending the examinations of some of the lower departments, the writer proposes to give, for the benefit of his brother teachers, and the cause of education throughout the State, some account of their internal workings.

These are, manifestly, among the best Schools in the State; the grading is as perfect, and the course of study laid down to be pursued in each department, as good, perhaps, as could be made, under existing circumstances.

These schools are, at present, and have been, for the past two

years, under the superintendence of GEO. B. STONE. This gentleman devotes his whole time—with the exception, perhaps, of one and a half hours daily, which time is devoted to hearing classes in the High School—to visiting the different grades, examining the classes, giving directions to the teachers, instruction to the pupils, and attending to all the exterior and interior arrangements of the Schools.

These schools are exerting, silently, on the city, an influence which is to affect her future prosperity and welfare, second to *no* other which can be brought to bear upon her; and if there is anything of which the people of Indianapolis *ought* to be proud, it is her Graded Schools.

These schools are divided into Primary, Secondary, Intermediate, Grammar School, and High School departments. The course of study for each is as follows:

Primary Department.

In these schools the pupils are required to read anything in the Indiana First Reader, and in the first half of the Second Reader; also, to spell every word in these books so far, amounting to more than twelve hundred words. The scholars, before leaving, must be able to print their spelling lessons, and also to write their names. No other text book is required than the Readers; but oral exercises are given in Geography and Mental Arithmetic. Each pupil is required to add quickly any numbers making less than *ten*, and as great a variety of combinations as possible, is given by the teacher. In Geography, the eight points of the compass are taught; the prominent streets and public buildings of the city, their location and direction from the school; the location of their homes; and all upon Colton's "Picture Maps."

It is made a leading object to make the pupils very thorough in all these subjects, before they are advanced to a higher grade. The pupils are drilled, for instance, upon their spelling lessons, until they are able to spell every word—completely mastering the book. Orthography, a branch quite too often neglected in Primary—and, in fact, in all schools—is taught more thoroughly and systematically in these, than in any the writer ever saw.

Secondary Schools.

Reading and spelling in the Second Reader is pursued till the book is completed, and about half of the Third Reader—the pieces being selected by the Superintendent. The McGuffey's Spelling Book, as far as the 36th page, is taken in connection with the Third Reader.

ARITHMETIC.—The scholars continue mental exercises in Arithmetic, for the purpose of obtaining accuracy and rapidity in addition, subtraction, and multiplication. The first half of the multiplication table; Ray's First Part Arithmetic. Geography as far as through North America, in Cornell's Primary Work.

It will be seen that no spelling book is used until the pupil enters the Third Reader, and then only the first 35 pages is attempted in the Secondary schools. Every word on these pages is completely memorized—"thorough drilling," being the motto. No pupil is permitted to advance to another grade till he has been rigidly examined by the Superintendent.

Intermediate Schools.

Mental Arithmetic is taught as far as the 50th page of Ray's Second Part. The work especially demanded from these fifty pages, is ability to add, subtract, multiply, and divide, with accuracy and rapidity. Geography, Cornell's Primary, finished, except maps of Asia and Africa. Spelling, to 50th page McGuffey's Spelling Book. Indiana Third Reader completed, in reading. Writing in copy books. Written Arithmetic through long division, the written and mental work exactly corresponding. Map drawing.

"Written examinations, in most of the studies, for promotion are required, and at least 90 per cent. of correct answers required in order to enter the Grammar Schools. Rapidity in Arithmetical work is especially insisted on."

Grammar Schools.

Mental Arithmetic, through Second Part, with the exception of Lessons 10, 11, and 12, of 25th Section; Practical Arithmetic through fractions and interest; through Berard's History of the United States; grammar commenced when history is completed. Through spelling book; spelling exercises, written and oral; geography completed, and map drawing.

High School.

Written Arithmetic, Ray's Higher, completed; English Grammar completed. All the higher branches of an English education are taught thoroughly; and the languages, so far as to enable students to enter the best Eastern and Western Colleges. Mathematics through geometry, surveying, &c.

In each department, the subjects only are taught, which are laid down in the course; and these are pursued at the same time, in similar grades, all over the city. The same time is devoted to

them in each school. Examinations and promotions take place at the same time. The examination of the classes is conducted by the same person, in all, so that a fair opportunity is given to compare one school and its teacher, with the others of the same grade; thus affording an opportunity for honorable emulation among the different schools. The same is true of all the departments. Each teacher attends to his or her own legitimate business, without infringing, in the least, upon the duties of another; thus a perfect system is secured.

In addition to the regular course of study pursued, in these schools, the subject of Phonetic teaching has been attended to in some of them, during the past year. This was considered an experiment. The writer watched the progress of this trial with considerable interest; witnessing, from time to time, the advancement of the class, and he is satisfied that the experiment has proved a successful one. The object was not to have this method of teaching supplant the old Romanic system of reading and spelling; but to give the pupils an opportunity of being more thoroughly drilled upon the elementary sounds of the language, and afterwards return to the old plan. If nothing else is secured, a greatly improved articulation, and a disciplining of the organs of speech, is accomplished, in the youngest pupils, that can not be attained by the old method of teaching. The experiment has proved that, with a year's attention, a pupil can learn to read Phonetically, and then take the transition from it to the old method, and be a *better reader and speller* than those pupils of an equal age who have spent the whole year in the Romanic system. All will admit that the subject of articulation is the most important one connected with a primary education; and yet, the one usually most neglected. To be convinced of the truth of this, one needs only to visit one of our schools for children. Hear the stammering, clipping of words, running one word into another, hesitating at the combination of consonant sounds, and giving one sound for another! These errors, once well grounded in a child, will follow him all his life. Why is this? Simply because he was not properly drilled upon the elementary sounds in the primary school. No after effort can make up for this neglect.

Any teacher, especially one who is calculating to teach in a graded school, would be richly rewarded by visiting these schools, and spending a week witnessing their workings. H. B. W.

INDIANA STATUTES AND QUALIFICATIONS OF
TEACHERS.

In the Statute of '55, in Sect. 145, of Common School Laws, we find the following: "No Teacher shall be employed unless he be of good moral character, nor until he shall have procured a certificate of qualification, as provided in this act." Sect. 149: "No person shall be licensed as a Common School Teacher, unless he or she may possess a knowledge of Orthography, Reading, Writing, Arithmetic, Geography, and English Grammar."

1st. With a due respect for the Authors of this 2d Section, we are constrained to believe that the amount of knowledge to be possessed is *loosely* defined. Without wresting the approved use of terms, much latitude may be given to the phrase, "*a knowledge of*." As we may say we have "*a knowledge of*" an event, when we are simply cognizant of its occurrence; we, also, may say we have "*a knowledge of*" a man, when our highest authority is common report; such *a knowledge* as would certainly justify no one in professing ability to analyze and teach his character.

Also, an individual may have "*a knowledge of*" reading, yet not *such* a knowledge as would warrant *tolerable*, not to say *accurate*, and *efficient*, instruction in the same. It may be hastily said, this is all hypercriticism, as the Legislature never intended any such meanings as the above. True, I believe they never did; but it will be remembered that there are other parties than the Legislature. Besides others concerned mediately, the teacher and examiner are immediately. If the teacher is on preparation for examination, he, doubtless, works with a standard in his mind, and that standard is the 149th Sect. Common School Laws. Now, as he may translate its language for himself, he may make it mean but a small amount of knowledge; and, if so, his attainments are liable to be of the same grade. And on these attainments, sustained, as he understands it, by the Statute, he claims his certificate of qualification, and, perhaps, too often gets it.

2d. As to the Examiner:—If he be—dare we say it—indifferent or illy qualified, he, having also the right of translating this language, may place the standard low.

Suppose, however, the examiner translates this into a *high* standard of qualification, and the teacher and his community, otherwise; here is, to say the least, embarrassment, perhaps unpleasantness, and, not improbably, district disturbance. But, admitting

that all agree in giving this language, perhaps, its highest meaning, viz.: "Unless he or she may possess" an *accurate and ready knowledge of said branches, as far as they (the branches) are treated in the generally approved books used in the common schools*; yet, it occurs to us, there should be inquiries beyond this. If we may be permitted to suggest, we would say it should be inquired: "Is he or she apt to teach—*ready and impressive* in imparting?" The pertinence of this inquiry will, doubtless, be apparent to all, when it is remembered how *unimpressively*, and sometimes *unintelligibly*, many persons speak on subjects with which they are well acquainted.

3d. *What are his habits?* Are they such as we would wish to see reproduced, ten years hence, in the lives of our sons? Among these, we may name *idleness, want of punctuality, want of system, indifference to moral merit or demerit, bluntness of manners and expression*, and others of like character.

3d. Something concerning his method of government?

4th. Is his pronunciation accurate?

5th. Is his *elocution passable*? Not such as meets the measure of the books on this subject; but, simply, does he use *standard words*? are they grammatically arranged, and are they *intelligibly* enunciated? Classes learn much at this point, either *good or bad*.

6th. Does he teach from *choice or necessity*? This latter, I am aware, is somewhat delicate; consequently, not always practicable. But, that great harm arises from the latter of these conditions, most admit. To illustrate: a young man proposes to teach for the first time, and, intentionally, for the last time, three months between the time of being discharged from one bank, store, or shop, and the time of finding a place in another. Another's health is too poor to engage in any other business, therefore, he teaches, not of *choice* but of *necessity*. It needs no comment to specify what kind of teaching will, with here and there a rare exception, be *doled out by such teachers*. Surely this class of teachers can not have a *zeal* for their work; and we are of the opinion that there is no class of men, save the public reformers, (and who is prepared to deny teachers the position of reformers—*ex-officio* reformers, at least?) that need a more constant *zeal* in their work than the teachers. Without specifying further, it may be said—who is sufficient for these things? True, we may all be found wanting when weighed in the balance of *exactness*; but that should not deter from efforts for all *practicable excellence*.

We think we have, by no means, in these specifications, gone beyond the limits, viz.: *practicable excellence*. It will be observed that we do not say by whom this secondary class of inquiries should be instituted; but, we may say, that we believe good results would accrue if the examiner held, also, an inspective relation to all the schools whose teachers he examines. He would feel, 1st, an identity with their work; 2d, a greater responsibility in his own work; 3d, would be possessed of the means of determining upon the accuracy of his judgment touching the qualifications of those licensed at his hands.

Without attaching blame anywhere, it may safely be said, that our inspective relations are *too loose*, all the way, from the State Superintendent down. The schools of our city illustrate this position. The inspective relations of the Superintendent of these schools, for the last two years, has been *close*; and, as a result of this, in connection with other elements, our schools have improved in *effectiveness* more, in this period, than they could have done under the previous *looser* arrangement, in triple this time. But as the general tone of this article has been non-praising, we have, perhaps, gone far enough.

Lest any may feel that we have had a modicum of fault-finding in our temper, we may be permitted to deny the existence of any such spirit, in our feelings, whatsoever of it may, in appearance, attach to our expressions; but, on the contrary, while feeling the necessity of much improvement, we hold an honest pride in our educational advancement of the last five years. G. W. H.

INDIANAPOLIS, Sept. 12th, 1857.

THE BOOMERANG.

This strange instrument is defined by Webster to be "A wooden weapon used by the natives of Australia," which definition would be equally applicable to *any* wooden instrument used by the natives of Australia. A great deal of interest has been manifested of late in this instrument, which is so unlike any ever used by civilized nations. The following has been going the rounds of the newspapers:

"This curious weapon, peculiar to the natives of Australia, has often proved a puzzler to men of science. It is a piece of carved wood nearly in the form of a crescent, from thirty to forty inches long, pointed at both ends, and the corners quite sharp. The mode of using it is as singular as the weapon. Ask a black to throw it so as to let it fall at his feet, and away it goes, full forty yards before him, skimming along the surface, at three or four feet from the ground, when it will suddenly rise in the air, 40 or 60 feet, describing a curve, and finally drop at the feet of the thrower. During its course it revolves with great rapidity on a pivot, with a whizzing noise. It is wonderful so barbarous a people have invented so singular a weapon, which sets the laws of progression at defiance. It is very dangerous for a European to try to project it at any object, as it may return to strike himself. In a native's hand it is a formidable weapon, striking without the projector being seen, like the Irishman's gun shooting around the corner, as well as straight forward. It was invented to strike the kangaroo, which is killed by it with certainty; and though a copse intervene between the hunter and the animal, the boomerang comes around the corner and breaks his legs."

The Baltimore *American* says, that this paragraph "does but faint justice to its claims; for the boomerang defies the calculations of science as effectually as did the construction of the bee's cell for centuries, until Brougham and the rest of the moderns demonstrated that the tiny insect was a better mathematician than Euclid. The mystery of the *boomerang angle* is an open question, but he will be a bold man who attempts to solve it by practical experiment: who throws the boomerang had best 'beware of the rebound.' Many have assayed to hurl it from them and found it rattling at their pates an instant after. The Australian savage alone has a sure thing of it. It returns to his hand from its deadly aim as naturally as the lamb to its mother's milk. He will throw it over a house, and, presto, he is ready to hurl it back again. Thrown as he throws it, it is an ever-recurring weapon, and the feat to a stranger looks like a piece of diabolism." A friend of mine, in order to heighten the marvelous character of this instrument, remarked, "that when it fails to hit the game at which it is thrown, it always returns to the one that throws it." Notwithstanding what has been said in the above quotations about scientific men being unable to explain the antics of the boomerang, they have attempted it, and, no doubt, given the true solution. Within the last three

years considerable interest has been taken in a small instrument called the *Gyroscope*, which exhibits many strange phenomena. I am under the impression that the conception of this instrument is due to *Foucault*, the man that started the idea of proving the rotation of the earth on its axis by the vibration of a pendulum. Prof. Walter R. Johnson, more than a quarter of a century ago, invented an instrument, which he called the *Rotascope*, designed to show that a revolving body tends to keep its plane of rotation always parallel to itself, and also to show the effect of a force so applied that it tends to change the direction of the axis of rotation. Johnson gave a description of the *Rotascope* in the *American Journal of Science and Arts* for January, 1832, page 265, *et seq.* The explanation of the principle of compound rotary motion is as old as the days of Newton. The *Rotascope* is an instrument whose operations are more easily comprehended than those of the *Gyroscope*, although the same principles are involved in each.

Prof. E. S. Snell, of Amherst College, in a lecture on *Planetary Disturbances*, delivered at the Smithsonian Institution in 1855, after introducing the *Rotascope* to show the tendency to parallelism of axis in a rotating body, says:

"We find an elegant illustration of this tendency to parallelism of axis in the boomereng, (he spells it with an *e* in the last syllable,) a curious missile used by the natives of New South Wales an account of which is given by Captain Wilkes in his 'Exploring Expedition.'* It is made of wood, about three feet long, two inches wide, and three-fourths of an inch thick, bent in the middle at an obtuse angle, somewhat resembling a rude sword. The article which I hold in my hand is an actual boomereng, bought by the explorers, and belonging to the collections of the Smithsonian Institution. Three or four others may be seen in the National Gallery, in the building of the Patent Office. It is thrown with a rapidly revolving motion, and is said to be very effective both in war and hunting. Those who are skilled in its use can throw it obliquely upward so that it will come back to them, or even pass over their heads, and hit any desired object behind them. It would be hardly safe for me to try the experiment here, lest (lacking the skill of the savage) I should hurt either you or myself. I can, with less hazard, project these models of stiff card, and only three or four inches long. Holding one of these with the obtuse angle between my thumb and finger, I snap the end forcibly, so

*For a description of the boomereng and its uses, see Captain Wilkes's 'Narrative of the United States Exploring Expedition,' vol. II, pp. 191 and 192.

as to send it off obliquely upward, with a swift rotation in its own plane, and you perceive that instead of describing the usual path of a projectile, after completing its ascent, it returns in the same plane and falls near me. If several be thus snapped off in different directions, occasionally one will perform an awkward somerset, but most of them will come back to me. It is that tendency (already spoken of) in a rotating body, to preserve its axis parallel to itself, which explains this apparently singular phenomenon. Observe that as the boomerang ascends, it is whirling on its axis perpendicular to the plane of ascent. Should it go onward in its descent, and cut the air edgewise, it must necessarily change its plane of rotation; it will not, therefore, do this. If it goes on, keeping its axis parallel to itself, it must strike broadside through the air, and the resistance is too great to allow of this. The only way in which it can maintain a parallelism of rotation, and yet cut the air edgewise, and also descend with the largest angle of inclination, is to come back to its place of projection as you have seen it do. It does, in fact, as the foregoing explanation requires, ascend and descend on an *inclined plane*, instead of pursuing the *parabolic* or *atmospheric curve* at all."

Thus we see the phenomena which at first seemed incapable of explanation, can be accounted for by principles long since discovered.

W. D. H.

MATHEMATICAL DEPARTMENT.

W. D. HENKLE, Editor.

No. 37.

[Some think that there is a difference between " $\frac{1}{2}$ a square yard and $\frac{1}{2}$ a yard square." There is evidently no difference, since " $\frac{1}{2}$ a yard square" = $\frac{1}{2}$ of a yard square = $\frac{1}{2}$ of (a yard square.)—Ed.

No. 49.

[Judge Clark and Jacob Staff have each observed that this problem has *six* solutions; three when the given point is within the square, and three when it is without. Lewis, in his Trigo-

nometry, has but one answer, namely, 59.95. *Sam Crow, J. N. Caldwell*, and *W. P. T. B.* each gave but one solution—*Crow's* result being 56.33; *Caldwell's* 60; and *W. P. T. B.'s* 56.7.]

No. 50.

[*Mr. Staff's* solution of No. 50 will be given in the November number.]

No. 51.

W. B. P. H., by putting the hills in quincunx order, gets 4,165 hills for the result. This is correct. *Staff* obtained 4,140, and *W. P. T. B.*, 4,106. The solution of this problem may be seen in the *Key to Greenleaf's National Arithmetic*.

No. 36.

Jacob Staff has given the following peculiar solution of this problem. How do our correspondents like it?

"When A makes his second 9 days' travel, he has retraced what he gained on B and traveled as much as B would the same 9 days, which would amount to the same as his (A's) first 9 days' travel. They would then be together, and, per question, they were together at $22\frac{1}{2}$ days. Therefore, if together at 18 and $22\frac{1}{2}$ days, they were together all the time, or B traveled 18 miles per day."

ACKNOWLEDGMENT.—*Samuel Alsop* has sent a 'solution of G. His result is 1 h. 6 m. 14.07 sec., and his solution disregards the dimensions of the cistern.

PROBLEM No. 53.—BY H. N. ROBINSON.

The hold of a vessel partly full of water (which is uniformly increased by a leak) is furnished with two pumps, worked by A and B, of whom A takes three strokes to two of B's; but four of B's throw out as much water as five of A's. Now B works for the time in which A. alone would have emptied the hold; A then pumps out the remainder, and the hold is cleared in 13 hours and 20 minutes. Had they worked together, the hold would have been emptied in 3 hours and 45 minutes, and A would have pumped out 100 gallons more than he did. Required the quantity of water in the hold at first, and the hourly influx of the leak.

PROBLEM No. 54.—BY THE EDITOR.

Given $x^4 - 6x^3 - 58x^2 - 114x = 11$ to find x by quadratics.

PROBLEM No. 55.—BY THE EDITOR.

Suppose three birds are sitting on a tree and a sportsman should shoot one : how many birds would be remaining ?

MR. STRIBBLING'S MATHEMATICAL BOOKS.—In looking over the library of our deceased friend, E. M. STRIBBLING, we have noticed the following works. Those desiring to purchase one or more of them, should write immediately to Mrs. Stribbling: *Bradley's Prac. Geometry, Perspective and Projections*; Price 7s. London, 1834. [This is a good work and will be sold for \$1.25.] *Robinson's Math. Recreations*; Price 50 cts. *Coffin's Analytical Geometry and Conic Sections*; Price 75 cts. *Hutton's Math. Recreations*, \$4.50. [We gave \$5 for a copy not so well bound.] *Rutherford's Hutton's Mathematics*, \$4. [Importer's price is \$5.50.] *Hackley's Algebra*, \$1.25. *Hackley's Trigonometry*, \$1.50. *Hackley's Geometry*, \$0.75. *Young's Algebra*, \$1.00. *Young's Analytical Geometry*, \$1.25. *Gillespie's Land Surveying*, \$1.50. *Trautwine on Embankments and Excavations. Sketch of a Railway*, 1841. *Mahan's Civil Engineering*, \$1.25. *Byrne's Practical Model Calculator for the Engineer, Mechanic, Machinist, Manufacture of Engine Work, Naval Architect, Miner, and Millwright*, 590 pages; worth \$1.75 or \$2. *Norris' Hand Book for Locomotive Engineers and Machinists*. Philadelphia, 1852. *Moore's Practical Navigator*; London, 1807, \$1.25. Original price \$2.50.

We have annexed such prices to the works mentioned above as our judgment has decided. These prices are, no doubt, less in every case than the purchase price.

The following is the title of a work published this year in London, in 2 royal 8vo volumes, with numerous plates :

"Railway Construction, from the setting out of the center line to the completion of the works; containing instructions for ranging curves, and setting out lines and levels in earth-works, permanent way, bridges, viaducts, on the square, on the skew, and on curves; a treatise on Lakings, Borings, etc., etc."

PERSONAL.

F. W. HURTT, formerly Mathematical Editor of the *Ohio Journal of Education*, and previous to that one of our mathematical

editor's students, received from the Ohio University, at its last Commencement, the honorary degree of A. M.

Judge McDONALD has declined the presidency of Asbury University.

Rev. CYRUS NUTT, formerly President of Whitewater College, at Centreville, has been elected Prof. of Mathematics in Asbury University. He will serve as President, in consequence of Judge McDonald's declinature.

A Mr. SCOTT has been elected President of Whitewater College, and has entered upon the duties of his office.

E. E. EDWARDS, formerly of Newcastle, has been elected Prof. of Languages in some Minnesota College.

Mr. J. S. WILSON and Miss H. P. HINKLEY, formerly teachers at Greenmount, are now engaged in the Richmond Public Schools. Miss Hinkley has, for the last year, been teaching in Maine.

Mr. HARMON, formerly of Tetersburgh in this State, has, at present, charge of one of the grammar schools in Richmond.

EDITORIAL MISCELLANY.

NATIONAL TEACHERS' ASSOCIATION.

On Wednesday morning, August 26, the Teachers from various parts of the Union, who had been sent or who had come of their own accord, to form themselves into a National Teachers' Association, met in the Athenaeum Building, Philadelphia, Penn.

The following gentlemen were enrolled in behalf of the States in which they reside:

NEW YORK.—T. W. Valentine and J. W. Bulkley, Brooklyn; James Cruikshanks, Albany.

MASSACHUSETTS.—D. B. Hagar, Wm. E. Sheldon.

IOWA.—James L. Enos.

INDIANA.—James R. Challen, Indianapolis.

ILLINOIS.—J. W. Burnitt and D. Wilkins.

PENNSYLVANIA.—Wm. Roberts, J. H. H. Sides, Pearl Swift, Wm. H. Pott, Wm. Vogdes, A. H. Laidlaw, P. A. Cregar, John S. Hart, Philadelphia; H. C. Hickock, Harrisburg; J. P. Wickersham, Edward Brooks,

Millersville; James McBride, Wm. H. Hunter, Wm. Sterling, Asa Jones, M. Watson, Isaac Sulger, and Robert Campbell.

MISSOURI.—Eli W. Wheelan.

DELAWARE.—T. M. Cann, J. C. Taylor, S. J. Witherbee, M. B. Lynch, N. R. Leech, and T. Clarkson.

GEORGIA.—J. F. Cann, Savannah.

MARYLAND.—D. Ganfer.

DISTRICT OF COLUMBIA.—Z. Richards, Washington.

SOUTH CAROLINA.—P. F. Smith.

The Hall was crowded with spectators—ladies and gentlemen—who had assembled with a manifest interest for this National Union of Teachers.

Mr. Valentine called the Convention to order, and read the call, which had been signed by the Presidents of the several State Associations, and published in educational and other periodicals. (See page 184 *Indiana School Journal*.) He explained the object of this enterprise, stating that it was not at variance with any other, but designed as a professional *Teachers' Association*, and in this respect different from any other which claimed to be National.

Mr. Enos, of Iowa, was appointed temporary chairman, who proposed that the session be opened with devotional exercises.

Rev. Dr. Challen, of Philadelphia, read a portion of Scripture and offered an impressive prayer appropriate to the occasion.

Mr. Sheldon, of Massachusetts, was appointed Secretary.

Mr. Hagar, of Massachusetts, offered the following resolutions :

Resolved, That in the opinion of the teachers now present as representatives of various parts of the United States, it is expedient to organize a National Teachers' Association.

Resolved, That a committee of three be appointed by the chair to prepare a Constitution adapted to such an association.

He said that the association designed to be formed by this Convention was purely one of teachers—a *professional* association. He considered that the time had come when the teachers of the United States should organize themselves into an association, so that teaching might be looked upon as a profession.

Mr. Valentine, of N. Y., hoped that these resolutions would not pass without some discussion, so that they might feel assured that the time really had come for the formation of such an organization. He was not discouraged on account of the small attendance; the American Institute had been formed under less favorable circumstances—three only having been present when the nucleus of that association was formed. He then proceeded to state the advantages of such an association as that proposed by these resolutions, illustrating his statements by his own and the experience of others in his own State. He also pointed out the facilities which rendered

the existence of such an association practicable. He said that no other means had been so instrumental in promoting the interests of teachers.

The President, by request, spoke concerning the resolutions. He encouraged the meeting with the assertion that the West was in favor of any enterprise promoting education. The enthusiasm with which kindred associations were formed and sustained in the West, proves that they believe such associations beneficial; he was sure that this was a *Teachers'* association, and that it would be cherished by a host of Western friends.

Mr. Bulkley spoke at considerable length of the practical advantages which had been enjoyed by all who had been connected with teachers' associations in counties and states; of the benefits to the vicinities in which they were held; of the improvement of the schools which had any connection whatever with associations. He thought that a National System of Education should not be adopted; he expected that the benefits derived by those who joined such conventions as this and participated in their actions, would be enough to justify their existence.

Mr. Hickok said that, although not within the charmed circle of teachers, he would look over the inclosure and see the progress. As a citizen of the Republic, he took an active and abiding interest in the teacher's success and prosperity; as an educational officer he was brought into co-operation with the teacher, and hoped to have the privilege of standing shoulder to shoulder with those who reared the intellect of Young America. He thought that the times demanded such an organization as this, and rejoiced to see so many faithful to the demand of duty.

Mr. Cann, of Savannah, Ga., said that he was present in no delegated capacity, but had come to give his own aid in this great work. He said that Savannah was of itself a testimony of what education had done and was calculated to do. He said that a system of public school instruction had been adopted by teachers of Savannah, and the people throughout the State had began to take an interest in the matter, and the prospect of a State system of public school education was very fair. The teachers of the South are making efforts very generally, and doubtless associations would exist there before long which would give an impetus to the effort now being made to form a National Teachers' Association.

Mr. James R. Challen, of Indiana, considered this Association as the crowning effort of a system of which our government is the model and the cause. Townships form counties, counties are subdivisions of States, and the States are united under a Federal Government, which protects, strengthens, and harmonizes the whole: even so Township Societies of Teachers were first formed, then County Associations, then State Associations, and now we feel the necessity of a Federal Union of Teachers. He saw more reasons why a national system of education should be adopted than objections against such a system. The results of the union, which is this day to be formed, would be suggestive and promotive of a National scheme of education which, in addition to other great and good conse-

quences, would send the teacher—not so much an officer as a missionary—to every Territory and every State in the Republic. In behalf of Indiana he bid God speed to this Union of Teachers, and pledged her co-operation in this effort to give universal empire to the republic of letters. He hoped that the next Convention would meet in Cincinnati, Indianapolis, St. Louis, or some other *central* point.

Mr. T. Clarkson, of Delaware, said that his little State was heart and hand in the enterprise.

Mr. Barritt responded in behalf of Illinois. He knew that the design of this meeting would call forth the wide-awake teachers of his State; and if they would feel the spirit of the West, let the next meeting be held in the center of the United States—Chicago. The school-masters would flock, by hundreds, from over the prairies, and give an impetus to the cause of education worthy of such a grand cause.

Mr. Wheelan, of Missouri, answered for the loyalty of his State to any National Association.

The President appointed Messrs. Hagar, of Mass.; Cann, of Ga.; and Challen, of Indiana, a Committee to draft a Constitution and Articles of Union as proposed by the resolutions.

The room being crowded, the meeting adjourned to a larger place—Sansom st. Hall.

AFTERNOON SESSION.—Mr. Enos, President, in the chair.

Mr. N. R. Leech, of Delaware, made some statements relative to the State educational operations in Delaware.

Mr. Richards, of Washington, said that, in the District of Columbia, there are a great many private schools. He said that it was very difficult to get up any interest on the subject of education in the city of Washington. The public school system is esteemed as being a pauper mode of education. He expected, however, that, in time, the public school system would be adopted, and would be successful. He said the people of Washington were governed; they did not govern themselves. There are only two buildings worthy the object of education in the whole District. Within two stones' throw of the Presidential mansion a school is kept in the old stable of Thomas Jefferson. He said that the city of Washington sustains about an equal number of public and private schools; the number of scholars in public schools is about 2,400; the number in private schools is about 2,200; number of children in the city, between five and twenty years of age, about 10,000 white and 2,800 colored. There are several schools for educating colored children. The amount of money expended for public schools is about \$25,000; the number of teachers in the public schools about 40; and in the private schools about 36.

Mr. Roberts, of Philadelphia, made some remarks in reference to the early history of the educational movement, exhibiting its difficulties and its ultimate success under the Lancasterian system. He traced its history to the present time, showing how, by perseverance and association, success was inevitable.

Several other able speeches were delivered, when the Committee on the Constitution reported. Their report was accepted and taken up article by article and adopted. The principles of organization and union are as follows:

1st Name—National Teachers' Association.

2d. Members—Gentlemen who are professional Teachers, or Superintendents elect. Ladies who are Teachers are eligible to honorary membership, and will be heard, in written essays, through active members. When a person is not a teacher, membership ceases. Initiation and biennial fee, \$2.00.

3d. Officers—None can be chosen but from active members; hence they must be teachers.

4th. Conventions biennially, the second occurring in 1858.

5th. Lectures, discussions, etc., must be on the subjects or sciences the teacher teaches.

6th. Impeachments, vacancies, altering and adding to the Constitution, how done, etc.

EVENING SESSION.—An address from Mr. Russell, of Mass., was presented and read by Mr. Valentine. This able and eloquent document will be found in the *New York Teacher*. After several happy and encouraging speeches, the following officers were chosen, according to the Constitution:

President—Mr. Z. Richards, of Washington, D. C.

Vice Presidents—D. B. Hagar, Mass.; T. W. Valentine, New York; Wm. Roberts, Penn.; James R. Challen, Ind.; J. F. Cann, Ga.; J. L. Enos, Iowa; T. C. Taylor, Del.; E. W. Wheelan, Mo.; P. F. Smith, S. C.; D. Wilkins, Ill.; T. Granger, Md.; L. Andrews, Ohio.

Secretary—J. W. Bulkley, Brooklyn, N. Y.

Treasurer—Rev. T. M. Cann, Wilmington, Del.

Counselors—Wm. E. Sheldon, Mass.; James Cruikshanks, P. A. Cregan, Pa.; N. R. Lynch, Del.; Wm Morrison, Md.; O. C. Wright, D. C.; W. S. Bossant, Ga.; W. T. Lucky, Mo.; A. J. Stephens, Iowa; Wm. H. Wells, Ill.; J. Hurty, Ind.

Cincinnati, O., was chosen as the next place of meeting, and the second Wednesday of August as the time. Adjourned.

MEETING OF THE BOARD OF DIRECTORS.

Immediately after the adjournment of the National Teachers' Association, the Board of Directors held a meeting.

Mr. Hagar moved that there be six lecturers appointed for the next meeting, viz.: two from the Southern, two from the Western, one from the Middle, and one from the Eastern States. Adopted.

Mr. Hagar moved that Messrs. Cann, of Georgia; Challen, of Indiana; Valentine, of New York; and Sheldon, of Massachusetts, be a committee to secure lecturers from their respective districts. Adopted.

Mr. Cruikshank, of New York; Taylor, of Delaware; Enos, of Iowa; W. H. Baker, of Georgia; and Hagar, of Massachusetts, were appointed a committee to prepare a list of subjects for discussion at the next meeting.

The following gentlemen (one from each State and Territory) were appointed a committee to collect educational statistics of the country, and report at the next meeting of the Association:

Messrs. D. B. Hagar, Jamaica Plains, Mass.; M. Woolson, Portland, Me.; D. H. Sanborn, Hopkinton, N. H.; C. Pease, Burlington, Vt.; J. Kingsbury, Providence, R. I.; C. Northend, New Britain, Ct.; A. Wilder, New York City; I. Peckham, Newark, N. J.; J. P. Wickersham, Millersville, Pa.; T. M. Cann, Wilmington, Del.; J. N. McJilton, Baltimore, Md.; Z. Richards, District of Columbia; J. Binford, Richmond, Va.; C. H. Wiley, Raleigh, N. C.; C. G. Messinger, Charleston, S. C.; B. Mallon, Savannah, Ga.; S. I. C. Sweezy, Marion, Ala.; D. McConnell, Florida; Mr. ———, Miss.; D. B. Slosson, Baton Rouge, La.; T. Fanning, Nashville, Tenn.; J. B. Dodd, Lexington, Ky.; W. T. Lucky, Fayette, Mo.; I. Mayhew, Lansing, Mich.; L. Andrews, Gambier, Ohio; G. B. Stone, Indianapolis, Ind.; D. Wilkins, Bloomington, Ill.; J. G. McMynn, Racine, Wis.; J. L. Enos, Cedar Rapids, Iowa; J. Denman, San Francisco, Cal.; W. Baker, Austin, Texas; E. D. Neil, St. Paul, Minn.; M. Oliphant, Kansas.

The following resolution was adopted:

Resolved, That Mr. Rickoff be appointed Chairman of the Local Committee, to make the necessary arrangements for the next meeting, and that he select his own associates for said committee.

ITEMS.

PROF. CHARLES DOWNEY, formerly of Asbury University, Greencastle, and recently elected Professor of Mathematics in the Iowa Wesleyan University, Mt. Pleasant, Iowa, died at Indianapolis on Friday, Oct. 9th.

J. M. OLCOTT, of Lawrenceburg, writes: "Having secured the services of a very superior corps of Female Teachers, our Public School has reopened this Fall with considerable enthusiasm. With some hesitancy the graded system was first introduced in this city last year; since then it has met with some degree of encouragement, and we believe that arrangements are pretty well matured for the immediate erection of a commodious school edifice at an expense of several thousand dollars.

INSTITUTE AT GOSHEN.—The Northern Indiana Teachers' Institute will hold its next meeting at Goshen, Elkhart County, Oct. 20, continuing four days. Prof. Hibben, with able assistants, will conduct the Institute.


REV. JAMES A. DEAN, late President of Mansfield Female College, Ohio, has been engaged as Principal of the Asbury Female Institute, at Greencastle.


MR. O. PHELPS is to take charge of the Grammar School, 7th Ward, Indianapolis.

J. W. HOUXHURST has taken charge of the high school at Anderson.

ANDREW J. RIKOFF has been re-elected Superintendent of the Cincinnati Public Schools.

WM. H. WELLS is re-elected Superintendent of the Public Schools of Chicago. Salary \$2,500.

 The salary of Mr. Philbrick, Superintendent of Boston Schools, is \$2,800. Of Mr. Edwards, recently elected Principal of the St. Louis Normal School, \$2,500. Of Mr. Hovey, Principal of the State Normal University at Bloomington, Illinois, \$2,500. Of the Principals of the Boston Latin and High Schools, \$2,800.

 Several communications which are accepted, are unavoidably crowded out of this number.

PROMENADE CONCERT AT RICHMOND.

A friend has furnished the following account of the Promenade Concert at Richmond, which was unavoidably omitted in the September number:

On the last evening of the recent meeting of the State Association, the citizens of Richmond gave the members of the Association a promenade concert and supper. The Assembly met in Starr Hall, one of the prettiest rooms in the State. There were present some six or seven hundred of the citizens of Richmond, among whom were the elite of the city. Judges, Lawyers, Doctors, and Ministers were present. The gray-headed sire, the stately matron, and the smiling maiden were there to heighten and enliven the scene. The fair ladies of the Quaker city—the most pleasant city of Indiana—were there with their sparkling eyes and lovely countenances to render the occasion more entrancing. The teachers and members of the Association were the guests of the citizens of Richmond. The spirits of those present were enlivened by the sweet strains of a Saxe-Horn Band from Cincinnati, engaged expressly for the evening, and assisted by the String-band of Richmond, which added greatly to the pleasure of those present by discoursing sweet sounds. The Hall had been previously arranged by having the chairs all removed to the sides of the room, leaving the whole space in the center clear for promenading. At about eight o'clock the band struck up one of their soul-stirring airs, when the assembly began to mix up promiscuously; some marching, some conversing, and others being introduced to teachers and strangers present. All seemed to enjoy themselves. Judge Test, Ex-Congressman Geo. W. Julian, and other celebrities were seen promenading with the smiling girls of sweet sixteen, and the staid mother making herself agreeable to the young men; and "All went merry as a marriage bell."

At about twelve o'clock the whole assembly adjourned to an adjoining room, where a sumptuous supper had been prepared, and all partook of the substantial which had been supplied by the good folks of Richmond. At one o'clock the crowd dispersed, well pleased with themselves and the rest of mankind. The teachers of Indiana will long remember their visit to Richmond, and the kindness, hospitality, and cordial greeting which they received from its citizens. The teachers parted, with the wish that none of their shadows might ever grow less.

There will be a Sabbath School Convention at Indianapolis, October 27th, 28th, and 29th. A large gathering is expected, and every effort will be made to entertain all. Persons who design attending the Convention are requested to send their names by mail to J. W. McIntyre, Secretary of Committee of Arrangements, so that provision may be made for them during their stay here. Many of the Railroads have consented to give return tickets free.

A machine has been invented in England for imitating in paint the grain of the most beautiful woods—such as maple, rosewood, oak, etc. It is said to surpass, in its imitations, anything which the brush has yet attempted.

BOOK NOTICES.

SARGENT'S READERS.

One of our lady editors, not having the fear of rival publishing houses, sends the following very decided notice of Sargent's Readers:

Have you ever examined these books? If not, we hope you will, and as soon as convenient. We can not now discuss the points of superiority over others, which we think they possess, but will mention a few.

The Primer and First Reader are based upon the word-method of teaching, like those of Webb, though we think the selections more chaste and appropriate than his. An "Explanatory Index" is found at the end of each volume, to which the pupil—and teacher, too, if need be—can refer for the pronunciation and meaning of any uncommon word; and where they can find a concise biographical sketch of every author whose productions are found among its contents. Then if we wish, as a means of cultivating literary taste, to have a class read, for criticism, *all* that any one writer has furnished for their book—say the pieces by Daniel Webster—they can turn to the "Index," find the name, and there, appended to the notice of the individual, will be seen the figures 147, 184, 226, &c., and on the pages thus indicated they can see what they want. The using of this "Index" will soon render easy the *habit* of consulting a dictionary; and who does not know how much the latter practice is neglected?

Then the "exercises in articulation," instead of being scattered all through the book, marring the beauty of page by coming between the lessons, mixed up with spelling and defining exercises and notes, are placed by themselves, in the forepart of the book, and *classified* so as to be easy of reference. We do not know how others will like this series, but we intend to use it the next school we take, and get every one else to do so if we can. This, of course, is impossible; we but ask our fellow-teachers, at least, not to condemn these Readers without a hearing.

See advertisement in this *Journal*.

C. M. B.

ALSO'S SURVEYING—E. C. & J. Biddle, Philadelphia.—We have just received a copy of this work and have devoted several hours to the examination of its contents. The result has been, that we are highly pleased with it. The book contains 432 pages, 100 of which are taken up with tables. These tables are printed on the old fashioned type, as they should be, since experience has shown that tables so printed are less injurious to the eye. The whole typographical execution is of the highest order. The practical character of the work is its leading peculiarity; it being just such a book as a country surveyor could use to a good advantage in field operations. If our space permitted, we would gladly give a fuller description of it. Every teacher of mathematics or practical surveyor should procure a copy; and we feel satisfied that a close examination of it will result in a very favorable opinion of its merits. We know of no work on Surveying which we would rather adopt as a class-book; and we are confident that it will have an extensive sale if the publishers take the proper measures to let the world know of its existence. W. D. H.

We have received from Hickling, Swan & Brewer, of Boston, Hillard's Series of Readers. Mr. Hillard is one of the finest scholars in America. His selections exhibit the finest literary taste; and these Readers are received with favor by Teachers and School Directors all over the country. It is an encouraging sign, when men of the literary standing of Geo. S. Hillard interest themselves in preparing suitable reading books for schools. One of the finest features of the highest book of this series, is the biographical sketches of the author, which precede each piece.

From H. B. Wilson, Esq., we have received a copy of McGuffey's New High School Reader, which completes the New Eclectic Series. We are very well satisfied with the present 5th Reader of the Old Eclectic Series. It contains many excellent selections, and is one of the best Readers for High Schools that we have ever seen. The New Series is, however, better adapted to Graded Schools than the old one.

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THE
Indiana School Journal.

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INDIANA: HER EDUCATIONAL CONDITION AND
PROSPECTS.

A Report read before the State Teachers' Association of Indiana, at its Second Semi-Annual Meeting, in Richmond, on Wednesday, the 26th of August, 1857; by E. P. COLE.

(Concluded.)

Among the evils arising from the feelings we have been discussing at some length, is a great neglect of the proper appliances for making the system efficient, and enabling the people to reap fully its advantages. Among these, stand school-houses prominently. Our houses are by no means what they should be. In many parts of the State are still found those old relics of frontier life, links in memory's chain connecting us with the past. I mean the primitive log school-house, with its clapboard roof, its puncheon floor, its greased paper and its numerous chinks to let in heaven's light and heaven's air; and for furniture the slab seat, upon which sits the urchin high in mid-air, his feet hanging in glorious independence of the floor, and one hand always necessary to maintain his precarious sitting. It is true, the specimens of this class are very few and far between. We only saw two or three of them in a pretty extensive tour over the State. There is another class, a grade above them in appearance and far more numerous. They are so nearly like some in Massachusetts, described by Horace Mann, that I can not do better than to borrow his description:

"I was passing along the road," says he, "and came upon a small frame school-house—the weather-boarding decayed and fall-

ing off—the window-shutters loosely creaking upon their hinges, and giving mournful notice of an intention to leave. The fence was broken down and the yard full of weeds and briers. But what most attracted my attention was the singular appearance presented by the roof. It had settled down at one corner, forming a tunnel leading into the house. Not knowing but that this might be an apparatus designed to explain the deluge, I dismounted and entered the house, and found the interior an exact counterpart of the exterior. The teacher, a pleasant young girl of sixteen, received me courteously, and in answer to my question whether the water coming through the roof did not incommode her, modestly replied, that it would, but the floor conveyed it off as fast as it entered."

I am not quite sure that I am doing justice to this quotation, as it is several years since I read it. I have, at least, the substance.

These descriptions, of course, apply mostly to our backwoods districts or to our small towns. Still, in many of our larger towns and cities, school-houses have been built, within the last ten years, most illy suited to the purposes of instruction. The Capital of our State stands pre-eminent in this respect; and that many of her scholars did not, long since, perish for want of pure air, and many others of the comforts of life, is owing, perhaps, to the great tenacity of life on the part of the subject. It is, however, a cheering fact, and we record it with great pleasure, that after a long conflict, she has resolved to ignore her former cherished plan of small rectangular sheep cotes, by a fiction in law and morals, styled school-houses, in which were, densely packed, human beings, and has determined to erect suitable structures worthy of the honor of the city, and commensurate with its wants. Our best and kindest wishes attend her in these her efforts in the right direction.

In many others of our large towns it is still worse; they have no school-houses at all, but during the two or three months in which the public school is taught, they use the basements of churches, dark and damp, or other rooms equally unsuitable.

It is no small cause for congratulation, that so much has been done and is still doing in this State for the purpose of providing suitable buildings in which to educate her youth. We hail these efforts as the harbingers of a better and brighter day dawning upon her destinies. During the last year \$314,272 were expended in the erection of school-houses; and it is designed to spend \$481,832 during the present year for the same purpose. It is highly gratifying that in many parts of the State, the new school-buildings are

well suited to the purposes for which they were designed; are roomy, convenient, substantial, and neat, an honor to the districts in which they are located; serving as monuments of educational zeal and progress. On the other hand, very many of the school-houses erected the last year, are not many removes, in style and convenience, from those whose places they occupy. In rural districts they are, in most cases, too small—standing unsheltered from summer's heat and winter's cold—frequently located at the roadside, or near some swamp, giving scholars ample opportunities for manifesting, even in the house, their free-soil proclivities. In respect to style and architecture, they are original, at least, if not aboriginal. These remarks, which are not exaggerated, apply mostly to our rural districts. Still, those having in charge the erection of school-buildings in our larger towns and cities, have, in most cases, sadly neglected the interests of those for whom they were acting. Although several expensive structures have been erected in many of these locations, there are but two or three which at all come up to the standard of a chaste and convenient school architecture. The State government must not be held responsible for this delinquency. She has, at an outlay of several thousand dollars, furnished to each township library copies of two of the most celebrated works in this department of architecture. The whole blame, therefore, must rest upon those having these important interests in charge, who it would seem have neglected to make any use of the aids just referred to.

This delinquency reminds us of a humorous incident which, as usual, fastens itself upon the "emerald gem of the ocean," where all that is ludicrous is said to take its origin. It was long before the days of gas, when the city fathers of the goodly city of Dublin, in view of the great danger as well as inconvenience of threading their crooked and muddy streets, upon mature and solemn deliberation passed an ordinance requiring every citizen going out on a dark night to carry a lantern for the public benefit. The citizens, being strict constructionists, obeyed the law to the *very letter*, and carried empty lanterns. A second ordinance became necessary, directing them to carry candles in their lanterns. Still Dublin's streets remained dark and dangerous; and finally a third law became necessary requiring the candles to be lighted. Now, in application, we have a section in our school law authorizing the purchase of works on school-house architecture, another providing for their distribution, and we certainly need a third, compelling

their use. But humor aside, it is really a sad reflection to the intelligent and zealous educator, that all over our State these structures are being erected; and imperfect as they are, will be fastened upon us for, perhaps, twenty years to come; thus, in no small degree, hindering the onward march of our great enterprise. One cause of this great error lies in the provisions of our law. Our school officers are too much restricted in the amount of money they are permitted to raise; and this accounts, in many instances, for the smallness and plainness at least of the buildings. The want of architectural fitness is the result of their own ignorance or delinquency. The defect of this part of the law became plainly evident in a visit, during last winter, through Vermillion County. The school-houses were just such as I have described. Just across the line, our neighbors in Illinois were building houses that shamed ours, and simply because they were not cramped in their efforts by the niggardly provisions of an illiberal enactment.

This subject of school-houses is one of great and growing importance, and most directly involving vital interests; and this subject should receive a larger share of attention at the hands of all interested in the cause. The fact that nearly \$500,000 are to be expended during the present year for the same purpose suggests most strongly to the members of this Association their duties in the premises. There is no doubt but that if we make the proper effort, by suggesting improvements and by calling attention to the merits of Barnard and Burrowes, we may save much of a useless expenditure of money; and what is more, secure the advantages of well-appointed school-buildings.

Another great evil arising from this want of educational feeling in the State is the lack of sufficiently well qualified teachers. There is here great demand for improvement; and this improvement involves so many and such varied interests, that we fear its full realization is neither very near nor very certain. These difficulties naturally divide themselves into two classes: First, in reference to the qualifications of those now engaged in the profession; and second, the great and growing demand for teachers—a demand largely exceeding the supply. That Indiana already possesses many, very many teachers thoroughly equipped for their duties, is, we think, a well recognized fact. And we believe that it may be permitted one of her teachers, without making himself obnoxious to the charge of vanity, to say, that men more unwearied in the discharge of their duties and more entirely devoted and self-

sacrificing in their aims can not be found in any other State, especially if he does not include himself in the number. But excellent as many of these undoubtedly are, the number is far too small to meet the wants of this great and growing State; and to form a phalanx, thick and serried, in opposition to the fearful barrier of ignorance arrayed against us. Whether they equal in number those who met and defeated the Persian monarch at the pass of Thermopylæ, we are not prepared to say. If attendance upon the meetings of this Association be assumed as a test, most certainly the number must fall far short of the "deathless three hundred." In any case we say the number is far too small; and not until it can be increased to ten thousand, may Indiana expect to enjoy the full realization of her anticipations of educational success. It is a sad reflection, that a large majority of the teachers now engaged in training youthful mind in Indiana, and in giving bent and direction to the tens of thousands now in process of being fitted for the responsible duties of mature life, are almost totally bankrupt of every qualification, mental or moral, for the high profession whose responsible duties they have assumed. They are not only ignorant, but they have neither the desire nor intention of qualifying themselves. They ignore all means for professional improvement and elevation; smile contemptuously at the bare idea of teachers' associations, whether State or county; have not the least need (?) for a school journal, or other professional aid; and comparing themselves with those who were *their* teachers years ago, perhaps on the verge of civilization, they pretend to claim knowledge enough for all practical purposes, and, we would add, for all impracticable purposes, too. We saw several of this class during the last winter, whom the scarcity of teachers and the \$30 per month had drawn from the anvil, the dray, or the plow. And such teachers! It would take the pen of a Dickens, aided by the pencil of a Cruikshank, to do them entire justice. They are the mere "school-keepers," parasites upon the profession, drawing their nourishment, *merely pecuniary*, from the body professional with a meanness of which their great vegetable prototypes, had they volition and voluntary motion, would scorn to be guilty.

Many of these teachers come from among the farmers of the State, and who, after the annual crops have been gathered, and the winter's wood chopped and hauled, and having nothing to do at home but to curry the horses and fodder the cows, are willing

to serve their fellow-citizens in the capacity of teaching their children; thus keeping out of the place men better qualified, by underbidding them. For it must not be forgotten, that in many parts of our State the district school is put up at a kind of auction; but strange to say, in all cases, the general rules of auction are reversed, and the *lowest* instead of the *highest* bidder becomes the possessor. We have had personal and frequent opportunities to witness the manner in which these persons pretend to discharge their assumed duties, and we have been pained to witness the gross perversions of science and literature in their so-called efforts at teaching.

Well might we invoke them, in the language of the sybil of old, "*Procul, O procul, este profani.*" We beg leave to disclaim any hostility to the class of men just described, except in the capacity of teachers. Honorable men, good farmers or mechanics, and worthy and useful members of society we personally know many of them to be, and as such we highly esteem them. It is only when they step out of their appropriate sphere and the departments for which they are well-fitted, and enter a field of labor for which they have not the least qualification, that we proclaim their utter bankruptcy.

Some may have concluded that the picture is quite overdrawn and far too dark; that a standard of qualification is erected by law, and that examiners are appointed to see that teachers conform to the standard. All such should know that the standard is too low, and that the patrons of any district may, by petition, interfere in behalf of any ignoramus of their choice, and defeat entirely the intentions of the law. Such things are of very frequent occurrence, breaking down the already frail barriers thrown around the system, making the examination of teachers a most contemptible farce, and discouraging the faithful examiner from attempting to discharge his duty, and prompting him to an utter despair of accomplishing anything for the cause. Thus it is that many well-qualified examiners, despairing of meeting the demands of duty, let into the profession every one—even the disgracefully ignorant. An incident, illustrative of this, occurred in the next county north of this place. One of these "school-keepers" applied for a certificate to teach a district school. The examiner had been, for years, a teacher, and a good one, but having been so often thwarted in his efforts to elevate the profession, would sometimes, in utter despair and contempt, give certificates to all who applied. In the

present case, however, he felt disposed to be thorough and minute in his examination, and began by questioning the candidate upon the sounds of the letters. The answers were pretty correct until they arrived at O, when the applicant informed him that he only understood the English language—meaning, most probably, the English alphabet—as far as the letter O. The examiner informed him that that was sufficient, and with mock gravity filled a certificate, stating that he had examined the bearer, found him well-qualified, and that he authorized him to teach the English language as far as the letter O. The teacher took his certificate and went on his way rejoicing. And as no more was heard from him, it is presumable that the very intelligent trustees who employed him, were perfectly satisfied with the certified results of his examination. Such examinations, equally ludicrous in degree if not in kind, are frequently occurring, and proclaim, trumpet-tongued, the inherent, disgraceful rottenness of this part of the system.

Again: the great scarcity of teachers is another feature in the low condition of the school-system. In many parts of the State, during the last Fall, there were almost entire townships nearly destitute of teachers, though high prices were offered for their services. Teachers were not to be had; even the poorer class were in demand, owing to the great emergency. This is an exceedingly interesting phase of the subject, and demands the earnest and immediate attention of friends of the cause. The truth is, that the number of teachers is sensibly diminishing. Many of them, and good ones, too, have left the profession, and entered other branches of business, simply because there was no prospect of steady employment in teaching. Indeed, how can a man reasonably be expected to enter or remain in a profession, when the almost certain prospect is, that he will be employed three months, only, in each year as a teacher, and must run the risk of employment in some other vocation, during the remaining nine? Now what is the remedy for this great, this increasing lack of teachers? Do I hear some advocate of normal schools plead their ability to meet the emergency? Well, let us see if normal schools will do it. Will they increase the length of time during which teachers are employed? We think not; and remember, here is the root of the difficulty. The average of the time during which public schools were taught the last year, is less than three months. Now will any man suppose that men and women can be induced to thoroughly qualify themselves for the profession in Indiana under such gloomy prospects? We are friendly to normal schools when a

necessity is created for them. If asked, What, then, is the remedy? we reply, more money; a more liberal spirit upon the part of our tax-payers. Until there can be money enough raised to keep the schools open at least nine months in the year, normal schools are not needed.

The private schools, the male and female academies in our State, are contributing, in no small degree, to the intellectual elevation; and although they do not appear among the public documents of the department of Public Instruction, still they are making their influence felt for the weal of the State. Some of them are managed by those whom we esteem our very best educators, which is an abundant earnest of their success. Many of these schools will not be disparaged by a comparison with the best private establishments elsewhere. Notwithstanding all this, we must be permitted to breathe the unselfish wish that the extension of a system of well-conducted graded free schools may suspend their necessity, and that very soon.

Indiana is abundantly supplied with the means of collegiate instruction, at least in the number of these institutions. Wabash, Asbury, Franklin, the N. W. Christian, Hanover, and the State University, are certainly sufficient to accommodate, for years to come, all our youth who are seeking for instruction in the higher departments of education. Manned as they are by accomplished and earnest men, there certainly is no necessity for our students leaving their own State for the purpose of a collegiate training. It were bootless, now, to inquire into the motives inducing the establishment of so many institutions—certainly more than are needed. But to us it is a matter of regret that the energy and influence which created these six, had not all centered upon the State University; and the money employed in building up the remaining five been otherwise directed into the great channels of Christian benevolence. We will not say, that better men could have been employed to fill the chairs of instruction. This would be unjust. But we can say, that one institution, upon which all the energies of the State were centered, would necessarily have been better supplied with the appliances for aid and illustration in teaching, and the student going forth from her walls better trained. These, perhaps, are fruitless speculations, and certainly will not be sympathized in by all.

It may be thought that we have drawn too dark a picture of the condition of educational affairs in our State. There are some present who we think can testify to the truthfulness of the sketch.

But dark as is the view presented, there are many streaks of light, bright, too, and cheering. And though we have presented a large amount of facts going to show that a most deplorable ignorance prevails in our State, still there is a large amount of intelligence, too, and we would fain hope that this intelligence is in the majority, and increasing.

There is much educational feeling in all parts of the commonwealth, which is largely on the increase, and which we sincerely hope and trust will yet work out our regeneration. In many of our large towns and cities, and in some of our smaller places, new views and more active efforts have appeared, and a strong desire to provide themselves with more efficient means for the intellectual elevation of the masses. These are certainly omens for good. As these influences shall go out, radiating from these centers, the whole mass of our population will become learned, and the results for which the friends of the cause have so long and so earnestly contended will then be seen and felt.

The brighter side of our picture, and the large encouragement held out for future exertion, can not, perhaps, be better presented than by the following table taken from the last Report of the Superintendent of Public Instruction :

Statistical Comparison of 1855 and 1856.

	In 1855.	In 1856.	Gain.
Amount of Common School Fund distributed to Counties	\$288,665 21	\$340,185 75	\$51,520 54
Average apportionment to each scholar..	64.8	.75	.102
No. children between 5 and 21 years, reported.....	453,581	458,356	4,774
No. reported attending school	161,546	195,976	34,440
No. of Districts reported	5,170	6,463	1,293
No. of Scholars reported	3,652	4,876	1,224
Average length of Schools in months...	2.85	3.03	.18
No. of Male teachers.....	3,018	3,973	955
No. of Female teachers.....	841	1,070	229
Whole No. of teachers	3,859	5,043	1,184
Average wages per month, Male teachers	\$23 00	\$23 76	\$.76
Average wages, per month, of Female teachers.....	15 72	\$16 84	\$1.12
No. of School-Houses erected.....	591	650	59
Cost of said houses	\$166,900	\$270,883	\$103,983
Townships reporting School House tax assessed	413	724	311
Amount of said tax	\$314,272 63	\$481,832 55	167,559 94

Aggregate number of School-houses built the last two years.... 1,241
 Aggregate cost of the same

.....\$437,783 00
 Total assessment for School-house erection the last two years.. 796,105 18

This is certainly cheering ; and though to some it may seem too slow progress, yet to us, who have watched educational advancement in Indiana during the past ten years, there are unmistakable evidences that the tendencies are upward and onward. Should the same rate of improvement continue for a few years longer, Indiana will measurably lose her unenviable reputation for ignorance.

Among the tokens for good in our present system, none stands higher or promises richer fruits than the library feature. It is, indeed, the grand conception, and is bearing no small nor mean share in accomplishing the ends and aims for which the friends of education in this State are laboring. Indiana may well cherish her township libraries. They are a potent agency for good ; working, perhaps, more secretly, more quietly, in enlightening the minds of our people, than the district school, but not less certain and effectually. The zeal manifested in the perusal of the books, and the high approval bestowed upon them, show that the originators of this scheme judged wisely in their efforts at furnishing our State with this means of intellectual improvement. The selection, too, of the books command our admiration ; and when we reflect how poorly some of our sister States are succeeding in a similar enterprise, we feel more like congratulating ourselves upon this our singular success. If these libraries can be sustained and increased from time to time, as their interests may demand, the highest hopes of complete success may be entertained of their influence for good upon the common schools of our State.

There is not only abundant motive for increased energy and zeal in the prosecution of our labors, but also abundant encouragement that entire success shall crown our efforts.

In this contest with ignorance, prejudice, and opposition, the great burden necessarily falls upon the teachers of the State. They must take the lead and let others follow. Upon them must rest nearly the entire burden of not only manufacturing but also of spreading abroad an educational spirit that shall take hold upon the extremities of the State, and not only arouse the people, but compel them to aid in the enterprise. And if the teachers of Indiana resolve that thing shall be done, and shall follow up that resolution by appropriate action, we shall not fail.

The teachers of Indiana have never yet made their influence and power felt as they might and should have done. There has been too great a lack of professional zeal, and not enough of a feel-

ing of the demand of the times upon the profession. There has been too great a want of sympathy and intermingling of views between them, and too great an absence of harmony of action. Had they maintained something like an unbroken front in their efforts at reform, much more would have been accomplished. We think that signs are present that these difficulties are to be speedily obviated, and a great change for the better take place; and we hope that we may not find ourselves mistaken;—that as often as the meetings of our Association roll round that we will always be found present, mingling in its exercises, having our feelings warmed, our zeal aroused, and better prepared to discharge our duties in our respective spheres.

We well remember the time in Ohio, when educational matters were at as low, aye, a lower ebb, than they now are in Indiana; when they had no Association, no School Journal, no teachers' institutes, no school libraries, an imperfect school law. Indeed, except in a very few of their cities, they had scarcely anything of which they would have dared boast. And how long ago, do you ask, was that period? Why, not more than twenty years. And during these twenty years, through the influence, mainly, of her teachers, she has made rapid advance, and now occupies a position truly proud. I well remember the time, scarcely more than ten years since, when less than ten men in the northern part of that State united together for the purpose of elevating the educational tone in their midst. One of those men is associated with us here to-day. A small band, but they seem to have counted their strength as well as the difficulties to be overcome. Like the little cloud no larger than a man's hand, just appearing above the horizon, but which afterwards increases until the whole heaven is covered with it, so the influence commenced by these men increased and grew until the whole State felt it and gave evidence of its power. As the result of a beginning so small, and then apparently so unpromising, we are permitted to see most gratifying results—a large State Association, composed of teachers competent and enthusiastic, with auxiliary associations in every county, teachers institutes in all parts, regular in their meetings and efficient in their organization and action, union and graded schools in almost every town and city, and even in many rural districts, two normal schools in active operation, and finally, an efficient and well-sustained educational journal, serving as a bond of union between all the important and varied interests. These are the grand results thus

reached—only the first ingatherings of a joyful and abundant harvest yet to be reaped; and all, under the blessing of God, resulting from seed that was sown in hope and in toil, if not in tears, by a few earnest men, who did not suffer themselves to be discouraged by difficulties or turned aside by dangers; but with their eyes steady upon the great object, went on manfully with their work.

With such an example before us, and followed by such encouraging results, what abundant encouragement is spread out before us, and how can we, how dare we, feel despondent and talk of failing. We trust that the material here is quite as plastic as in the sister state just referred to, and if not, so much the greater opportunity for displaying our moulding skill. Some of these results we have already reached, and in such a manner as to afford high hopes that all the others will likewise be attained, and “that in due time we shall reap if we faint not.”

We firmly believe that Indiana is destined to relieve herself of the foul blot of ignorance now staining her character as a State, and that she will take high and enviable ground in all that pertains to the thorough intellectual and moral development of her whole people—that in this she will equal and even surpass her physical greatness. But this must necessarily be the work of time. Those of us who, for years, have borne the heat and burden of the day, whose locks remorseless time has blanched, will be gathered to our fathers before that millennium shall dawn upon us. But we trust and hope that some of the younger members of this Association met with us here to-day, will live to see the full, the glorious realization of all those warm hopes, those ardent anticipations. God speed the day!

LOVE OF KNOWLEDGE.

There is nothing of more importance in the intellectual training of a child than the cultivation of the love of knowing. The child which has this love in a remarkable degree, must become remarkable for his intelligence, and under favorable circumstances must also become distinguished in some department of knowledge. He has within him the very essential of success, the motive power that produces the highest intellectual results. Men may cram their

minds with facts from a love of display or from some other motive, but they are like men who cram their stomachs with food for the sake of showing how much they can swallow. Such are ready, at any moment, to disgorge in disgust what they have taken.

There is no mental growth in such a case; the mind does not appropriate, it is only stuffed; and the final result must be to take away all power, and, therefore, induce stupidity. But men who love facts for their own sakes, and who take delight in contemplating their relations, are constantly strengthening their mental organisms, and are, therefore, constantly growing intellectually. Hence, a teacher who kindles in the breast of a child this love into a flame in respect to any department of knowledge, does for him a work of the highest intellectual importance.

All children have, however, the love of knowing certain things, and it is this love which gives rise, for the most part, to the countless questions of early childhood.

But some have a love of knowing facts of one class, and others, facts of another class. One boy in the family will know all about the details of the farm, while his brother will be deeply interested in the shipping which passes up and down the river, and perhaps the third will find his delight in books. All have the love of knowing, but it is confined in each case to different departments, and each one draws his intellectual food from his own department. But since the facts taught in schools are of importance to men, the mind should be stored with them from a love of them, if possible, but if this be impossible, then some of them should be crowded into the mind, and the business of life should be depended upon to create an affection for them, by showing their importance.

There is no real mental growth in the latter case: there is only a very expensive storing away of lumber, much of which will fall out of the store-house and be lost. But while this process of cramming is going on, for it is in fact but little else in many cases, there can be secured habits of order and promptness, and felicity of expression; for the scholar can be compelled to practice the things which will lead to these results, until it become, as we say, "second nature."

But no one can be compelled to love anything. Our loves must be cherished by gratifications; they can not be driven by force; and where the love is feeble, it requires the most skillful nursing to bring it forth into vigorous activity. Hence, none but the most skillful teachers can kindle a mere spark of the love of study into

a bright flame, while any one can throw on the fuel after it burns bright and high. The test question for a teacher is, How much love of acquiring knowledge can I infuse into my pupils? Good recitations may be made from all sorts of motives, and hence it is that so little is done in intellectual culture after leaving school. A thirst has not been awakened which it is an ever-recurring pleasure to slake by drinking deep at the fountain of truth.

A teacher, if he would move his scholars as much as may be through the love of study, or love of being intelligent, must be, himself, proficient in what he attempts to teach, for then he can present, from his abundant store, facts in the most enticing manner, for the purpose of provoking a desire for knowledge, just as we place the most inviting dishes before those whose appetites we wish to awaken. He should be careful that he is himself a lover of truth for its own sake, for the mental state of the teacher has a powerful influence upon the scholar.

The scholar, moreover, should have the most definite and exact ideas, for the mind grows by delights, and there is no delight in half-knowing a thing. No scholar will be much delighted in a subject of which "he rather thinks that he guesses that he knows something."

One fact really known, so that the child when alone can ruminate upon it and enjoy it, will do much towards strengthening his love for that fact, and thus towards cultivating his love for all kindred facts. But, however lamentable it may be, no teacher can hope to have the love of becoming intelligent, the sole impulse to study in his school.

Men must be governed and lead by what is in them. Those who are almost beasts, must be governed more like animals than those who are filled with higher motives. But is the business of the teacher, surveying his work from an exalted stand-point, to depend upon the noble motives of his pupils as far as he can do so for their good.

C. B. C.

MECHANISM OF VITAL ACTIONS.

The following is from an article by O. W. Holmes, in the last number of the *North American Review*:

If the reader of this paper lives another complete year, his self-conscious principle will have migrated from its present tenement

to another, the raw materials even of which are not as yet put together. A portion of that body of his which is to be will ripen in the corn of the next harvest. Another portion of his future person he will purchase or others will purchase for him, headed up in the form of certain barrels of potatoes. A third fraction is yet to be gathered in a southern rice-field. The limbs with which he is then to walk will be clad with flesh borrowed from the tenants of many stalls and pastures, now unconscious of their doom. The very organs of speech with which he is to talk so wisely, or plead so eloquently, or preach so effectually, must first serve his humbler brethren to bleat, to bellow, and for all the varied utterances of bristled or feathered barn-yard life. His bones themselves are, to a great extent, *in posse*, and not *in esse*. A bag of phosphate of lime which he has ordered from Professor Mapes, for his grounds, contains a large part of what is to be his next year's skeleton. And, more than all this, and by far the greater part of his body is nothing after all, but water; the main substance of his scattered members is to be looked for in the reservoir, in the running streams, at the bottom of the well, in the clouds that float over his head, or diffused among them all.

We need not wonder, in view of this perpetual change of material, that the living body, as a whole, resists decomposition. The striking picture drawn by Cuvier in his "Introduction to the Comparative Anatomy," in which the living loveliness of youthful beauty is contrasted with the fearful changes which a few hours will make in the lifeless form, loses its apparent significance when we remember the necessary consequence of the arrest of its interior movements. The living body is like a city kept sweet by drains running under ground to every house, into which the water that supplies the wants of each household is constantly sweeping its refuse matters. The dead body is the same city with its drains choked and its aqueducts dry. The individual system, like the mass of collective life that constitutes a people, is continually undergoing interstitial decomposition. If we take in a tun every twelve month, in the shape of food, drink, and air, and get rid of only a quarter of it unchanged in our own substance, we die ten times a year; not all of us at any one time, but a portion of us at every moment. It is a curious consequence of this, we may remark by the way, that if the refuse of our great cities were properly economized, its population would eat itself over and over again in the course of every generation. We consume nothing. Our food is like those everlasting pills that old pharmacopœias tell of, heir looms for the *dura ilia* of successive generations. But we change what we receive, first into our own substance, then into waste matter; and we have no evidence that any single portion of the body resists decomposition longer during life than after death, only as that which decays is at once removed, while the living state continues.

ENGLISH LUXURY.

Few persons are aware of the wealth and splendor that surround many of the English nobles in their princely residences. I visited some of the palaces, and such magnificence I never witnessed before. I will give an account of the residence of three of the English nobles, in the language of one who was there before me :

THE EARL OF SPENCER.

The Earl of Spencer's homestead, about sixty miles from London, comprises ten thousand acres, tastefully divided into parks, meadows, pastures, woods, and gardens. His library, called the finest private library in the world, contains fifty thousand volumes. Extensive and elegant stables, green-houses, and conservatories, game-keeper's house, dairy-house, dog-kennels, porter's lodge, and farm-houses without number, go to complete the establishment. Hundreds of sheep and cattle graze in the parks about the house.

THE DUKE OF RICHMOND.

The Duke of Richmond's home-farm, at Greenwood, sixty miles from London, consists of twenty-three thousand acres, or over thirty-five square miles. And this in crowded England, which has a population of sixteen millions, and an area of fifty thousand square miles, or just thirty-two millions of acres ; giving, were the land divided, but two acres to each inhabitant. The residence of the Duke is a perfect palace. One extensive hall is covered with yellow silk, and pictures in the richest and most costly tapestry. The dishes and plates upon the table are all of porcelain, silver, and gold. Twenty five race-horses stand in the stable, each being assigned to the care of a special groom. A grotto near the house, the ladies spent six years in adorning. An aviary is supplied with almost every variety of rare and elegant birds. Large herds of cattle, sheep, and deer are spread over the immense lawns.

THE DUKE OF DEVONSHIRE.

The Duke of Devonshire's place at Chatsworth, is said to excel in magnificence any other in the kingdom. The income of the Duke is one million of dollars a year, and he is said to spend it all. In the grounds about the house are kept four hundred head of cattle, and fourteen hundred deer. The kitchen garden contains twelve acres, and filled with almost every species of fruit and vegetables. A vast *arboretum*, connected with the establishment, is designed to contain a sample of every tree that grows. There is also a glass conservatory 387 feet in length, 112 in breadth, and 67 in height, covered by seventy-six thousand square feet of glass, and warmed by seven miles of pipe conveying hot water. One plant was ob-

tained from India by a special messenger, and is valued at ten thousand dollars. One of the fountains near the house plays 276 feet high—said to be the highest jet in the world. Chatsworth contains thirty-five hundred acres; but the Duke owns ninety-six thousand acres in the county of Derbyshire. Within, the entire is one vast scene of painting, sculpture, mosaic work, carved wainscoting, and all the elegancies and luxuries within the reach of almost boundless wealth and highly refined taste.—*Selected.*

FREE TRANSLATIONS.

The profession of the teacher, though a toilsome one, and, at times, sufficiently annoying, is by no means all cloud, but is very frequently relieved by broad streaks of sunshine. Sometimes, when the prompt and accurate recitations of the student fail to produce the proper degree of sunshine, his very blunders are so intensely ludicrous, they not only forestall all reproof, but actually contribute to the amusement, if not to the instruction, of the teacher. We are indebted to our scholars for many a dispersion of discouragement and vexation by these, their gross blunders.

The Latin language seems to be a never-failing source of these blunders, and we propose presenting a few, a part of which have fallen under our own notice, the remainder gathered from our friends.

A student in one of our colleges was once called on by a lazy fellow, to translate for him the following passage from Cæsar:—*"In qua ratione Cæsar distribuit homines barbaros."* And with most provoking gravity rendered it thus: "In distributing rations, Cæsar gave hominy to the barbarians." The ignoramus, true to the teaching, made use of the translation in his recitation.

The following is charged upon a student of Kenyon College, Ohio: *"Cæsar transit Alpes summa diligentia,"* "Cæsar crossed the Alps on the top of a diligence."

Another, in the same class, translated the well-known proverb, *"Nemo omnibus horis sapit,"* as follows: "No one knows at what hour the omnibus starts."

A Cincinnati law student, being called upon to translate the following passage, *"Nemo repente fuit turpissimus,"* rendered it thus: "Nobody can become a good lawyer without practice."

The following provokingly ludicrous translation of a well-known line in Virgil's 2d *Æneid*, was perpetrated by a student in Miami University: "*Infandum, Regina jubes renovare dolorum.*" "O Queen, you order me to give up the infernal dollar."

The following are old ones:

"*Exegi monumentum ære perennius.*" "I have eaten a monument harder than brass."

"*Qui fit Mæcenas, ut nemo.*" "Who made Mæcenas? Nobody."

The subjoined is quite refreshing:

"*Necesse est eum clam aliquem habere.*" "He should eat another clam."

The annexed, is a "Know Nothing's" translation of the following line of Horace: "*Mæcenas, atavis, edite regibus.*"

"*Atavis*, our ancestors, *edite*, ate, *regibus*, kings, *cænas*, for their suppers, *Mæc*— couldn't find that in the dictionary."

"*Collegium juvat.*" "It delights me to have gone to College."

"*Stant litores puppes.*" "The puppies stand on the shore."

"*Jam satis niviis.*" "Now that is enough of your knives," as one student said to another, who had carelessly wounded him with his knife.

We subjoin the following fine examples of *dog Latin*, by a Mathematical professor:

"*Pone canem ex.*" "Put the dog out."

"*Sum brevissimus pecuniæ.*" "I am very short of money."

"*Illic vadit cum oculo ejus ex.*" "There he goes, with his eye out."

One of the Professors in our State University informs us, that once, when a student, and suffering some mortification from a badly recited lesson, a fellow student tendered him consolation in the following elegant Latin:

"*Gallus tuus ego et nunquam animus.*" "Cock your eye and never mind."

The above is probably Latin nonsense enough for once.

E. P. C.

EARLY STUDY OF THE LANGUAGES.

There is nothing like exercises in arithmetic and logic, to strengthen and enlarge the reasoning and inventive powers, in

early youth. Indeed, there is a variety of very apt recourses towards this end; but nothing is more improper than the committing to memory of words and of arrangements of words in a foreign language, which, to children, are meaningless sounds. The reiteration of this, is tedious and disgusting to them, and they gather from it no knowledge of things that interests them. In consequence of this, they grow averse to books and study. To talk to them in a college style, in words of which they know not the meaning, gives them no knowledge and veneration of learning. If they are in awe of the person who talks to them in this way, it is not on account of this, but some other circumstance—as the relation of parent—or something else that unites the idea of endearment with that of permanent predominancy of powers. But it is not a buzz of unintelligible articulations that they venerate; for they no more understand what is delivered them in technical or high-flown words, or such as are of rare occurrence except in elegant literature, or discourse among accomplished persons, than if it were addressed them in Greek or Hebrew. And although the accompaniment of mystery and obscurity seems sometimes to propitiate teaching, yet it can not excite love and respect.

Children must have a love of learning, (*i. e.*) of the actual acquiring of additional knowledge, and aptness, and powers of intellectual application, before they can make progress in any branch of learning whatever. The way to generate this love, is to feed their understanding with such things as it can lay hold of, and not by compelling them to reiterate Latin or Greek nouns, pronouns, verbs, or their terminations, or talking to them in a style which none but a collegian can understand. I speak of children at nine or ten years, and from this to fourteen; whereof I am sure it will be generally admitted by judicious people, who but give themselves leisure to reflect on this subject, that they can not be allured to love study and make a right use of books, unless they get some new knowledge by means of them; nor, indeed, to make any considerable proficiency till they love books better than play. The reason of their loving books and study is, that these afford them some sort of satisfaction or delight; and how can they give them delight, except by making them acquainted with ideas with which they were not acquainted before? Yet the traveling over a few Latin or Greek words every day, discloses nothing new or pleasing; it does nothing towards gratifying their curiosity; it is idle, empty mummery. Hence they contract an aversion to books and study. But

to give this the precedence to moral education, shocks all common sense. To prefer this silly flouncing of foreign and dead lingo, before moral education, indicates a depraved taste and a depraved heart. Some, however, are so enamored of the idea of making linguists of their children, and so anxious for the attainment, that they buy this vain futile smatter of unknown languages, while their children can not spell nor pronounce their own, at the expense of their morals, which they take no pains to cultivate any otherwise than sometimes giving them a piece of advice or admonition in terms that are suited to the comprehension only of college learned people; which has as much effect as to talk Greek to a horse. It is trifling to talk to children on important occasions, merely to please one's self, when we should deliver our instructions, advice, or commands in such terms as they can not misapprehend. Yet, collegians in their dotage are apt to run into this habit, in compliance with their early associations, which have inveterately attached pleasure to particular sorts of lingo and fashions of address.

NEW HARMONY, Aug. 4, 1857.

L. D. W.

SOMETHING FOR LITTLE FOLKS TO LEARN.—It frequently happens that certain states and cities, instead of being referred to by their proper names, are indicated in some other way. Thus we have Virginia, "the Ancient Dominion;" Massachusetts, "the Bay State;" New York, "the Empire State;" New Hampshire, "the Granite State;" Vermont, the "Green Mountain State;" Connecticut, "the Land of Steady Habits;" Pennsylvania, "the Keystone State;" South Carolina, "the Palmetto State;" Ohio, "the Buckeye State;" Indiana, "the Hoosier State;" and Illinois, "the Sucker State."

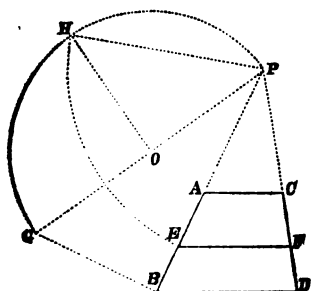
So, also, we have New York City, "the Metropolis of America," "the Commercial Emporium," and "Gotham;" Boston, "the Modern Athens" and "the Literary Emporium;" Philadelphia, "the City of Brotherly Love," "the City of Penn.," and "the Quaker City;" Baltimore, "the Monumental City;" Cincinnati, "the Queen City," "the Queen of the West," and "Porkopolis;" New Orleans, "the Crescent City;" Washington, "the City of Magnificent Distances;" Chicago, "the Garden City;" Detroit, "the City of the Straits;" Cleveland, "the Forest City;" New Haven, "the City of Elms;" Richmond, Ind., "the Quaker City of the West;" Lafayette, "the Star City;" and Indianapolis, "the Railroad City."

W. D. H.

MATHEMATICAL DEPARTMENT.

W. D. HENKLE, Editor.

SOLUTION OF No. 50.—BY JACOB STAFF.



Let ABCD be the proposed trapezoid. Continue BA and DC to intersection at P. Upon B, and perpendicular to PB, raise BG=AP; draw BG, and bisect in O, upon which as a center describe the semi-circle PHG. Make OH a line at right angles with PG; join PH. Upon

P, with PH as a radius, describe the arc cutting AB in E. Draw EF parallel with CA or BD, and it is done. Because the areas of similar triangles are as the squares of their homologous sides, $PB^2 + PA^2 = \text{twice the area of } PAC + AD = PG^2$; but $PH^2 = \frac{1}{2}PG^2 = PE^2 = \text{area of } PAC + \frac{1}{2} \text{ area of } AD$.

[This Problem was solved by *Judge Clark*, in a manner somewhat different. *W. P. T. B.'s* solution was incorrect. We should be pleased to see a geometrical solution of this problem which would not require the point P.—ED.]

G. W. Hough has sent an algebraic solution of this problem. *J. Truit* a solution which is only applicable to a right-angled trapezoid.

No. 43.

[We sent along with *Mr. Alsop's* solution some comments, which have been mislaid. Out of seven solutions of this problem, two agreed with that of *Olmsted's*, viz.: *Staff's* and *Robinson's*; *Stevens*, *Morgan*, and *Agricola* agree with *Atherton* and *Alsop*. The difference originates in the different ideas attached to the words, "They pull at an angle of 30° with each other." We consider that the most simple view of this language is, that the ropes form with each other an angle of 30 degrees, or that the men stand at an angle of 30° from one another; those degrees being measured on

the circumference of a circle whose center is the point to which the ropes are attached. This is the view adopted by the majority of the seven who have furnished solutions.—ED.]

No. 48.

[*Staff* writes thus: "We may consider the field divided into 144 squares—the side of each square being the breadth of a swath. At each corner A would mow two squares more than B. Now there are three rounds, wanting the last side, consequently, 11 corners, or 22 squares which A mowed more than B, or $\frac{83}{144}$ and $\frac{61}{144}$, were what they respectively moved. The published rule and solutions I think are wrong."]

SOLUTION OF No. 52.—BY WM. B. MORGAN.

Since it will not affect the result sought, let the cylinder weigh one pound per foot, and let x be its length. (It will also be the weight in pounds.) $30-x$ is the distance through which it will fall. The velocity (v) which a body acquires in falling = $\sqrt{(\text{space} \times 4m.)}$; also the momentum (M) = weight \times vel. Hence in this case, $M = x\sqrt{(30-x)4m.}$

Differentiating this equation for a maximum, we find $x=20$ feet.

[This problem was also solved by *M. C. Stevens*, *Judge Clark*, *G. W. Hough*, *W. P. T. B.*, *Staff*, *Joel E. Hendricks*, and *Agricola*.]

H.

Staff thus disposes of this theorem: "Because AB' , $A'B$ and BC' , $B'C$ are alike affected to each other and to the lines AC' , $A'C$ and ABC , $A'B'C'$, therefore whatever line is common to any two of the points, M , N , P , is common to all three."

[A geometrical demonstration of this theorem, by *Prof. Gillespie*, may be found in the March number of *Silliman's Journal*. *Mr. Alsop* wishes it to be solved by analytical geometry.—ED.]

J.

Joel E. Hendricks obtains .0079m for the quantity of matter to be added, m being the mass in the earth. We hope to receive other solutions of this problem.

PROBLEM No. 56.—BY G. W. HOUGH.

Two lights, *a* and *b*, of different intensities, of which *a* is the greater, are placed at a given distance from each other. Required all the points at which their intensities are equal.

PROBLEM No. 57.—BY JUDGE CLARK.

Find the interest of \$100 for one year at six per cent., the interest being compounded every instant.

PROBLEM No. 58.—BY THE EDITOR.

If 2 be 3, and 3 be 5, and $6\frac{1}{2}$ be 11, what is the $\frac{1}{2}$ of 26, and the $\frac{1}{4}$ of 27?

PROBLEM No. 58.—BY THE EDITOR.

With the flat hand I throw a body of 3 lbs. 14 feet perpendicularly upwards, urging it on with the hand for the first two feet. Required the pressure on the hand.

N. B. *H. B. Wilson's* problem will receive attention in the next. It came after the above was written.

From *Barnard's American Journal of Education*.

ON READING.

Extract from a Letter to a Young Teacher, by GIDEON F. THAYER.

Many writers have given *rules* for reading. They may be very well for adults, and especially for teachers; but I doubt whether, with some exceptions, they can be made useful to inculcate on the pupil. Whatever the rules adopted in a school may be, *the pupils will read as the teacher does*, imitating all his peculiarities, whether correct or incorrect, whether beauties or deformities. He should, therefore, see to it that his own style—the paramount rule to his pupils—is the result of sound judgment and good taste.

To say that one "must keep the voice up at a comma, and let it fall at a period," and that we should "pause at a comma long enough to count one, and at a period while one might count four," is simply absurd, as in-

variable rules. This may be well enough in most cases, but the exceptions occur so frequently as to render the rule nugatory; and, besides, reading according to such rules would inevitably be most mechanical, stiff, inexpressive, and lifeless.

The grand, invariable rule in reading is, *read to the sense*. This involves explanation and *instruction* on the part of the teacher, which, with many, are wholly omitted. The lesson to be read should be gone over carefully by him at the time of its assignment; the obscure portions clarified; the classical, historical, political, geographical, and other allusions, explained; and the attention of the class directed to any word, difficult or uncommon, contained in the lesson. They should be required to read it repeatedly and carefully, before the next class-time, seeking the meaning of every word they do not understand, and the proper pronunciation of those words about which they have any doubt. When they subsequently assemble for the class-reading, the teacher should examine them, to ascertain whether they retain all the facts connected with the lesson, which they are supposed to have acquired, and tell the story of the piece, in their own language, before they begin to read it from the book. They will then be prepared to do justice to the author and to themselves; but *no one can, unless by accident, read appropriately what he does not understand*.

I do not mean, in a foregoing remark, to say that *no* rules can be useful to the taught. There are rules, comprehensive in extent, and almost invariable in application, that may be advantageously insisted on; such, particularly, as indicate the tones of voice most appropriate to the expression of the various emotions of the mind, with appropriate rate, force, &c. These, it is true, embrace departments of the subject more advanced than many of the classes in school would readily appreciate—those of *taste* and *feeling*; but, still, the judicious teacher need not despair of making all understand them in a reasonable time, if he have books adapted to the various capacities of the pupils.

That only is good reading which renders the meaning of the author clear, forcible, and expressive,—whose *tones* would indicate the nature of the subject, even when the language was not understood. And this may be attained to by very young pupils, if well taught, and made to comprehend the lesson to be read.

Correct pronunciation, too, is an important element in good reading; and although, without it, the sense may be expressed and the feelings moved, much of the pleasure of the hearer is lost. A coarse style of pronouncing degrades the reader, and gives one a low idea of his breeding and his taste.

It will cost you infinite pains to fix this pronunciation as the habit of your pupils, because, in a large proportion of the families to which they belong, a coarse style is indulged in, which will do much to neutralize the example and most strenuous efforts of the teacher. But be not discouraged. Correct every mispronunciation perpetrated in school, whether in private conversation, in class recitation, in class reading, or in elocution-

ary exercises. In time, you will make your *mark*, which will tell with favor and advantage on your school.

Among the errors in pronunciation, current in our community, are those of giving the sound of *a* in far that of *a* in lad; as in *grasp*, last, transport; giving the long sound of *a* for the short sound, in alone, above, atone, and to the article *a*, as *a* man, *a* book, *a* house;—giving the sound of double-*o* for long *u* [ew], in attune, revolution, constitution;—thrusting *u* into words where it does not belong, as elum, helum, whelum, for elm, helm, whelm; giving *er* for *o* or *ow*, in potato, fellow, window;—*aw* for *re*, in more, deplore, restore;—*er* for *aw* in law, raw, saw,—or rather adding *r* or *er* to the word, as lawr, law-er;—*i* for *e* in get, yet;—*e* for *i* in sit, stint;—*u* for *e* or *a*, in silent, reverence, repentance;—*u* for *i* short in ability, facility;—omitting the *d* in and, and the *r* when not initial, in almost every word; the *e* in belief benevolent; the *h* in whig, when, what; the *e* in every, novel, counsel; the *i* in Latin, satin, certain; the *g* in present participles—reading, speaking, loving, &c.

Some of these inelegancies are so nearly universal, that persons—critics in language, too—are to be found, who would abandon the cases as hopeless, making no effort to correct the faults. To such despair the faithful teacher never yields, but, in proportion to the difficulty, nerves himself for the struggle. The faulty sound of the letter *u*, adverted to above, can be corrected in any school, if the instructor is a man of taste and energy, and resolves in earnest that it shall be done. The same may be said of the much-wronged *r*. There is no occasion for indulging children in calling storm, *stawm*; corn, *cawn*; morn, *mawn*;—nor of pronouncing burst, first, durst, as if spelled *bust*, *fust*, *dust*.

Children in school will do what they are constantly, perseveringly, and resolutely required to do; and if these faults still adhere to them, the teacher is responsible.

Allow me to say a word as to the mechanical arrangement of your reading classes. Method, in trifles even, serves a valuable purpose, and is essential to success with the young.

Require them always to *stand*, when reading, in a position of ease and gracefulness, the shoulders set back, the chest protruded, the book in the left hand; every eye fixed on the lesson, and, as far as possible, allow nothing to be going on in the room that may divert the attention of any member of the class. Let the lesson be announced—page, subject, author, chapter, &c.—by some one designated by the teacher, sometimes at the head, sometimes at the foot, and sometimes elsewhere. And, instead of the word “next,” when another pupil is to read, call on some one by name, standing near or remote from the preceding reader, and thus, without any regular order, till the lesson is finished; sometimes returning, again and again, if you see cause, to the same individual. You will thus be sure of the attention of every one, and each will have the advantage of instruction, not in his own portion merely, but in that of every classmate.

If time should not suffice for a regular and effective drill of every member of the class, do what you can *thoroughly*; sham nothing. To teach a class in reading properly is not the job of a few minutes; it should occupy from half an hour to an hour, according to the number of members, that each one may carry away from the exercise some new thought, some item of knowledge, at every lesson. You, of course, can not do all this, with each of your classes, every day, unless your school is under the charge of several teachers for the various departments; but—following out this plan—when a lesson is given, it will be of some value to the learners.

EDITORIAL MISCELLANY.

ANNUAL MEETING.

Teachers throughout the State! Are you intending to come to the Annual Meeting, at Indianapolis, in December? The interest in these meetings is steadily increasing, and the number of those who attend greater at each successive gathering. Do not permit slight causes to keep you away. We must have the *greatest* and best meeting the next time, that we have ever had. Let it be a jubilee meeting. Let there be such a gathering as there was in Chicago, last winter, when near 700 teachers convened. No one can afford to stay away from the Annual meeting. It will make him feel poorer the whole year. These meetings relieve the monotony of school life, break up the isolation which makes his work hard and tedious; in short, oils him up, causes the machinery of his life to move with less friction, and makes him feel like a new man. Come, by all means, to the Association at Indianapolis. The teachers and citizens of this city will do their best to make your visit a pleasant one.

ILLINOIS NORMAL UNIVERSITY.—The State Board of Education were instructed to locate the University in that city or town, accessible and not otherwise objectionable, which should offer the greatest donation.

Upon opening the bids, it was found that Peoria had offered in the aggregate, including the estimated value of the site, \$80,000, and Bloomington \$140,000. The institution was located at Bloomington. The contract for building has been awarded to Messrs. Mortimer, Loburg & Loker, of Chicago, for \$83,000, and is to be completed by the first of September, 1858. The building will be three stories high besides the basement; 156 feet long and 100 feet wide, and the top of the spire is to be 156 feet from the ground. Temporary rooms have been secured, and the University opened on the 5th ult.

OBJECTIONS AGAINST TEACHERS.—The objections occasionally urged by school-officers and others against teachers often exhibit wondrous wisdom and insight—*e. g.*:

A Director was once asked how he liked a certain teacher. He replied, "Very well, as to bringing on scholars in their learning; but he has some singular notions about the school-room. Only think, he won't let them spit on the floor, *as if it was made for anything else than to be spit on!*"

Not a thousand miles from the place where this is written, a most skillful teacher was dismissed from a school which he had in an admirable state of discipline and proficiency. One of the principal charges against him was, that he taught grammar without a book. The writer was invited to become this teacher's successor, and he visited the town "to see about it." The first question propounded to him by the County Commissioner was, "Do you teach grammar without a book?" We remarked it had been our custom to do so, with classes commencing the study." "That is enough," replied our County Commissioner, "I have been a *teacher of an academy myself* for many years, and I never had the presumption to suppose that I knew more than the man who wrote the grammar. We must have a teacher who will not set himself above the books." We took the hint and left on the next train.

School-officers and patrons, it might be modestly suggested, often need information in regard to methods and means of teaching, as well as the school-master himself. It would do *them* no injury to visit Teachers' Institutes, and good schools.—*Illinois Teacher.*

GRANT COUNTY TEACHERS' ASSOCIATION.—Pursuant to previous notice, the teachers of Grant county, Indiana, and other persons friendly to the cause of education, met at the seminary in Marion, at two o'clock, P. M.

A temporary organization was effected by calling Samuel Sawyer to the chair, and appointing James R. Smith Secretary.

A brief Constitution was adopted, and the following persons were elected to fill the various offices for which it provided:

President, Rev. Samuel Sawyer; V. President, Arthur W. Sanford; Secretary, James R. Smith; Treasurer, Mrs. Emily Flinn; Executive Committee, Cornelius Shugart, Miss Emily Kelly, Miss Sarah Sperbeck, J. R. Sperbeck, and W. H. Hayford.

Several resolutions, relating to the business of school teaching, and the educational interests of the county, were reported, discussed, and adopted, among which was the following:

"*Resolved*, That we are highly pleased with the *Indiana School Journal*, and will use our influence to extend its circulation."

By resolution, the Secretary was directed to forward a copy of the proceedings for publication in the *School Journal*.

The Association adjourned to meet the last Saturday in November next.
Marion, Oct. 31, 1857.

JAMES R. SMITH, Sec'y.

The Illinois State Teachers' Association meets at Decatur, Dec. 29th, 30th, and 31st.

Where is the "Voice of Iowa." We have not heard it since August.

We have received a report of a Teachers' Institute held at Laporte, in August last.

OFFICERS OF THE INSTITUTE.—President, F. P. Cummins; Vice Presidents, Mrs. P. T. F. DeMott, of Elkhart county, A. T. Bliss, of Laporte county, C. Fitz Roy Bellows, of St. Joseph county, R. F. Patrick, of Lake county, G. D. Kent, of Jasper county, and Rev J. B. L. Soule, from Marshall county; Jasper Packard, Corresponding Sec'y; D. DeWitt, Recording Sec'y; Miss E. R. Chandler, Treasurer; R. F. Patrick, R. M. Johnson, Miss P. T. Matchett, Miss L. S. Lowry, and Miss M. E. Kent, Executive committee.

The Institute discussed the question of Normal Schools, and passed some good resolutions, among them the following:

"*Resolved*, That it is the duty of every teacher in the State to subscribe for the *Indiana School Journal*, and that County Commissioners should furnish to each township in their counties a copy for the use of School Trustees.

"Mr. Barrett moved that the above be amended by striking out 'it is the duty of' and substituting 'we recommend.' Mr. Johnson spoke at length on the amendment, stating that the *Journal* was a necessary part of the teacher's stock in trade; that it was his duty, in preparing himself for the arduous and most responsible duties of the school-room, to keep pace with the spirit of the age, and in order to do this he should subscribe for the *Journal*. Mr. Packard thought he had seen teachers who were too poor to pay a dollar for it. The amendment passed, and the resolution was adopted.

"*Resolved*, That the members of this Institute will labor in their counties to increase the circulation of the *School Journal*. Passed.

"*Resolved*, That teachers who make no effort to attend Teachers' Institutes and Associations, have not sufficient energy and skill to make themselves ornaments to the profession nor profitable to their employers and to community at large. The resolution passed without a dissenting voice."

The Institute numbered 46 members, and when it adjourned, Goshen was selected for the place of the next meeting. Time, third Tuesday of October. We have had no report of the last meeting.

HAMILTON COUNTY TEACHERS' ASSOCIATION.—An association of teachers and others interested in educational matters, was organized in Westfield, on the 2d of September.

The officers of the society, elected for a term of six months, are:

A. H. Hiatt, President; Mrs. Susan Moss, Vice President; A. P. Howe, Secretary; J. F. Reeves, Treas.; D. Moss, M. R. Armstrong, H. Shepard, Mrs. Susan Moss, Miss A. Sanders, and Miss L. A. Wood, Executive Committee.

The meetings of the Association are held regularly on the second Saturday of each month, at different places throughout the county. The list of membership numbers forty and is still increasing.

The Normal School at Lebanon, Ohio, is in a flourishing condition. There are, this term, 110 scholars, several of whom are from Indiana.

ITEMS.

A lady of fine reputation as a teacher, would like a situation in a High or Common School. Address the Resident Editor of this Journal.

A gentleman now teaching in the State, who has had good success in teaching, would like a situation in a High or Grammar School. Address as above.

Prof. ALPHEUS CROSBY, formerly Professor of Greek in Dartmouth College, has been elected Principal of the Massachusetts Normal School, at Salem, in place of Mr. RICHARD EDWARDS, who has taken charge of the Normal School at St. Louis.

A new school-house was dedicated on the 19th inst., at Indianapolis. This last house is the best arranged one in this city for the Graded system. It is in the Collegiate Gothic style, and is an ornament to the city.

We have received a capital address, delivered by Mr. M. SIMPSON, before the Parke County Teachers' Association. There are some rich things in it, which we should be glad to extract, and may, perhaps, do so next month.

The Muncie *Messenger* has an able report on the Educational condition of Delaware county, by J. TRUIT, from which we shall make some extracts in our next. The same paper also contains an address by the Rev H. N. BARNES. The Delaware teachers must have had a rich feast at their last meeting, judging from the samples we have seen.

PORTRAIT OF DR. ARNOLD.—Wm. L. Gage, editor of the New Hampshire *Journal of Education*, during his recent tour in Germany, had a fine lithograph of Dr. Arnold executed by an eminent artist of Berlin. It is 18 in. by 15. It may be procured by forwarding 30 cts. in postage stamps to Mr. Gage, Manchester, N. H.

BLACK BAND IRON ORE.—A correspondent of the Philadelphia *Ledger* describes recent discoveries in the above famous ore in McKean County, Pennsylvania:

Black Band Iron is found in Scotland, and has obtained celebrity for the peculiar quality of the metal it produces. It makes iron which is much more fluid when molten than any other, and therefore it makes castings much finer, and with less weight of metal.

The closest search has been made for it in America, but up to the month of October, 1856, it had not been found of such an extent and quality as to be worthy of remark.

But in October, 1856, Professors Owen, of Indiana, and Newham, of Lackawana, while examining the new bituminous coal in McKean County, Pennsylvania, discovered the regular seam of this most valuable mineral, forming the roof of a five-foot vein of cannel coal, and giving undoubted evidence that it covers a great portion of that coal field. They suspected that some of the slates of the coal veins might be saturated with iron, because in no part of our State is limestone of other varieties so plentiful as in McKean County. The vein is five feet thick, and one bench of it (18 inches in thickness) yields, by analysis, 43½ per cent. of iron.

BOOK NOTICES.

We have before us a duodecimo volume of 238 pages, of which the following is the title:

"THE MATHEMATICAL CORRESPONDENT; containing New Elucidations, Discoveries, and Improvements in the various branches of the Mathematics, with collections of Mathematical Questions resolved by ingenious correspondents; adapted to the present State of Learning in America; and designed to inspire youth with the love of Mathematical knowledge, by alluring their attention to the solutions of pleasant and curious questions—and to promote the cultivation of the Mathematics, by opening a channel for the ready conveyance of discoveries and improvements from one Mathematician to another. Vol. I. 'In the Mathematical sciences truth appears most conspicuous, and shines in its greatest lustre.' EMERSON, NEW YORK. Printed by Sage & Clough, for the editors, and sold by T. and J. Swords, No. 160; W. Falconer, No. 112; Sage & Thomon, No. 149, Pearl Street; and G. Baron, No. 99, Pine Street. 1804."

The Frontispiece is a portrait of George Baron, born Sept. 1, 1759. This portrait was published in 1806, so that it seems that the book was not bound before that time. R. ADRIAN and G. BARON are credited with solutions of all the problems, with the exception of three in number 11. Mr. Baron's silence is thus explained in a remark: "The *health* of Mr. Baron, our principal editor, was, last summer, entirely destroyed by three of the understrappers of the *Health Committee*. Deprived of his assistance, we solicit our contributors to endeavor to render their solutions as perfect as possible."

ENOCH LEWIS, whose death, last year, was announced in this *Journal*, was one of the contributors to the *Correspondent*, and so also was JOHN CLAPP, who was afterwards a contributor to the *Mathematical Diary*, started by Dr. Adrian in 1825. He died before the *Diary* was discontinued.

W. D. H.

WELLS'S NATURAL PHILOSOPHY—*Iverson & Phinney*.—In glancing over this new work, we find many things to please us, and we are certain that the many good qualities which it possesses will insure for it an extensive circulation. The formation of the rainbow is more fully illustrated by engravings than in any work we have seen; and Faraday's theory of electricity is given along with Du Fay's and Franklin's. Four pages are devoted to the subject of architecture, and under the subject of water-wheels, is found for the first time in any American work on Natural Philosophy, a description of the Turbine water-wheel. Under the subject of Hydraulics, the author discusses the question, "Does the Mississippi River run up hill?"

W. D. H.

SANDERS'S YOUNG LADIES' READER.—We call the attention of our fellow-teachers to the above work, forming a part of the "American Educational Series," published by IVISON & PHINNEY, of New York. It is a large 12 mo. of 500 pages, including a short, but clear and comprehensive, introduction to elocution, which can be easily extended by the intelligent teacher. The whole work comes more nearly up to *our* idea of a young ladies' reader, than any other work with which *we* are acquainted. One feature of the work which pleases us much is, the freshness of a large part of the selections. They are not such as our students have encountered in other books, with which they have become well acquainted, and of which they were long since wearied. In regard to the mechanical execution of the book, it is only necessary to observe that it is of the neat and attractive style so characteristic of the series of which it forms a part.

Our opinion of the work is based upon an actual use of it, during several weeks, in our seminary, in which we are using nearly three dozen copies.

Teachers desiring further acquaintance with this reader, are directed to Mr. John N. Terwilliger, Anderson, Agent in this State for the "American Educational Series."
E. P. C.

We have received the first number of the *Atlantic Monthly*, published by PHILLIPS, SAMPSON & Co., Boston, Mass.—a periodical which is receiving the unqualified commendations of the Press throughout the country. Terms, \$3 per year.

Emerson's Magazine and Putnam's Monthly, one of the best Magazines published. Price \$2. J. M. EMERSON & Co., New York.

Forester's Boys' and Girls' Magazine, BINNEY & RAND, Boston, Mass. Terms, \$1. A capital thing for children.

WELLS'S SCIENCE OF COMMON THINGS, or a Familiar Explanation of the First Principles of Physical Science, for Schools, Families, and Young Students Illustrated with numerous engravings. By David A. Wells, A. M. IVISON & PHINNEY, 321 Broadway, New York.

Natural Science, taught from such a text book, becomes practical and interesting. The thousand phenomena of every-day life are explained. This book is, properly, a supplement to a good text book in Philosophy. A perfect work would be a combination of the two. There is no better Philosophy than Wells's; but a work which unites the excellencies of both these works is much to be desired.

ANNUAL MEETING OF THE TEACHERS' ASSOCIATION.—This will be at Indianapolis, on Tuesday, Wednesday, and Thursday, Dec. 29, 30, and 31.

Order of Exercises.—Tuesday, 3 o'clock, P. M., Organization.

Tuesday, 7 P. M., Address by Zaccheus Test, Esq., of Richmond.

Wednesday, 9 A. M., Reports of Officers of Institution, and Resident Editor of *School Journal*.

Wednesday, 2 P. M., Report on Normal Schools, and discussion.

Wednesday, 7 P. M., Address by Hon. G. W. Julian.

Thursday, 9 A. M., choice of Officers of Association, and Editors of the *Journal*.

The committee have not yet been able to perfect their arrangements. Other persons have been written to, and a fuller programme will be published in the December number of the *Journal*, and also in the papers throughout the State.

The arrangements entered into with the railroads will enable all members of the Association to come and go on half fare, with the exception of the Terre Haute & Richmond and the Bellefontaine Roads. Arrangements will also be made for the free entertainment of all members of the Association.

By Order of EX. COMMITTEE.

NAMES OF DELEGATES IN ATTENDANCE AT THE SEMI-ANNUAL MEETING OF THE INDIANA STATE TEACHERS' ASSOCIATION, HELD IN RICHMOND, AUGUST 25TH, 26TH, 27TH.

HENRY COUNTY.

Elwood Macy,
Isaac Kinley,
William Armstrong,
Joseph Unthank,
John F. Poker,
Seth Stafford,
David Monfort,

Robert B. Smith,
H. Benedict,
Emily J. Griffin,
Bettie A. Boone,
Julia Ann Hyatt,
Martha G. Hunt,
Mary Hunt,

Kate Taylor.

DELAWARE COUNTY.

J. Truit,
H. Clarkson,
Hettie V. Simpson,
Susan Jarrett,

Lydia Jarrett,
Sallie Hathaway,
Mary S. Kurtz,
Eliz. Sullivan,

Emma Reynolds.

JACKSON COUNTY.

D. Moore.

HANCOCK COUNTY.

Lucinda B. Butler,

M. C. Rawls,
Matilda A. Rawls.

MONROE COUNTY.

E. P. Cole,
Mrs. E. P. Cole,

James Woodburn,
Jacob N. Wolfe.

PUTNAM COUNTY.

J. W. Husher,

A. F. Randolph.

DEARBORN COUNTY.

S. R. Adams,
J. M. Olcott,
O. H. Smith,

Thos. Olcott,
H. D. Perry,
Mrs. Anna M. Olcott,
Mary C. Olcott.

Names of Delegates.

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FLOYD COUNTY.

H. B. Wilson,
J. G. May,

Wm. W. N. May,
M. Angeline Keethley.

JOHNSON COUNTY.

Jacob Rathenburgh.

RANDOLPH COUNTY.

Mahlon Thomas,
Wm. Hill,
S. G. Hill,
Anderson Hogston,
P. B. Harris,
Elisha Parker,
E. M. Ives,
A. T. Knight,
Jos. R. Jackson,
Levi Hill,

Martha Parker,
Julia A. Mendenhall,
Lydia Thomas,
M. E. Shoemaker.
Eliz. Parker,
Ann Wright,
P. H. Fellows,
Emily Howe,
Jona. Roberts,
Wm. L. Boyd.

RUSH COUNTY.

Eliz. Thornburg,
Jane Henley,
Ann Henly,
Ann R. White,

Jemima D. Henly,
Miss M. Hall,
Allen Hill,
John T. Lindley,

Robert Lennington.

CARROLL COUNTY.

Geo. Bowman.

PORTER COUNTY.

Geo. A. Symons.

POSEY COUNTY.

Mary C. Widup,
Mrs. G. W. Julian,

M. D. Gage,
L. D. Willard.

MARION COUNTY.

Theodore Heilscher,
Silas T. Bowen,
Chas. N. Todd,
Geo. B. Stone,
O. Phelps,
Pleasant Bond,
Robert Taylor,
T. J. Vater,
Emma Reynolds,

Geo. W. Bronson,
Oliver Coggeshall,
Frank Peavey,
Mary Landis,
Mrs. Hall,
Lavinia Moore.
Lizzie Taylor,
Fannie Taylor,
Geo. A. Simonson.

UNION COUNTY.

Rev. J. W. Monfort,
Milton Hollingsworth,
R. B. Abbott.

E. F. Brackenback,
Mrs. L. D. Brackenback,
Mary Lynch.

FAYETTE COUNTY.

Jos. L. Brady,

Maria Johnson,
G. P. Jenkins.

MORGAN COUNTY.

Samuel A. Hadley,

Geo. Carter.

HAMILTON COUNTY.

A. P. Hull,

Miss J. F. Motphis.
Mrs. M. H. Harley.

CRAWFORD COUNTY.

Samuel Scott.

OWEN COUNTY.

Elisha Thompson

*Names of Delegates.***SULLIVAN COUNTY.**

John V. Wolfe.

ALLEN COUNTY.

Geo. A. Irwin.

TIPTON COUNTY.

Moses Harmon.

MADISON COUNTY.

E. M. Butler,

D. H. Roberts,

I. N. Terwilliger.

BOONE COUNTY.

C. N. Sims.

HENDRICKS COUNTY.

David M. Cox,

A. P. Butler,

Eliz. H. Cox.

TIPPECANOE COUNTY.

A. J. Vawter,

Lucy J. Potter,

P. C. Vawter,

M. J. Smith,

E. W. Kinnan,

Lucia Noyes,

Miss F. S. Semans,

Mrs. E. W. Kinnan,

Belle Kilgore.

WAYNE COUNTY.

W. D. Henkle,

S. R. Mitchell,

Mrs. Kate A. Henkle,

A. C. Shortridge,

L. A. Estes,

J. W. R. Lemon,

Mrs. H. C. Estes,

Robert Gordon,

M. C. Stevens,

Hiram Hadley,

Mrs. O. F. Stevens,

E. J. Hampton,

J. S. Wilson.

Lizzie Pool,

Mrs. R. D. Wilson,

Ursula Tharp,

Josiah Hurty,

Edna E. Stanton,

Mrs. Josiah Hurty,

Susan P. Owen

Samuel Royce,

Jane E. Green,

Mrs. E. M. Royce,

Mary L. Elliott,

Dr. Joel Vaile,

Clara Rogers,

Mrs. P. M. Vaile,

Annie Schofield,

H. R. Perry,

Ann E. Moore,

Miss Sarah E. Perry,

Emily Haworth,

W. B. Morgan,

Dr. Mary P. Thomas,

Mrs. W. B. Morgan.

Hannah Birdsall,

R. S. Fisher,

Eveline Cox,

Miss A. J. Fisher,

Mary D. Matthews,

Chas. Atherton,

Martha M. McCorkle,

Joseph Moore,

Leah P. Bogue,

Milton Bond,

Mary Hough,

Oliver White,

Lizzie E. Coffin,

Milton H. Jessup.

Lizzie A. Mendenhall,

Daniel Vaughan,

Miss C. A. Lemon,

Geo. W. Grant,

Mary M. Morris,

Matthew Charles,

Eliza Stanley,

Thomas Charles,

Emily Ellis,

Rev. D. S. Altman,

Sarah Rame,

Wm. Ratliff,

Mary C. Henshaw,

G. S. Pegg,

Sophronia J. Fortner,

Wm. S. Ballenger,

Mary Widup,

E. C. Thornton,

Martha Shombre,

Alice Hurty.

OHIO.

G. W. Kimball,

Mrs. V. D. Longley,

Dan. Rapp,

Sarah E. Turman,

A. Holbrook,

Harriet Lentz,

I. S. Morris,

Sarah Pierce,

D. C. Stubbs,

Mrs. E. M. Vaile,

Eliza Longley

——— Wilson.

THE
Indiana School Journal.

VOL. II. INDIANAPOLIS, DEC., 1857. NO. 12.

REPORT ON PHYSICAL GEOGRAPHY.

READ BEFORE THE TIPPECANOE COUNTY ASSOCIATION,
BY MISS LUCIA A. NOYES.

In the realms of nature nothing is useless, nothing unadorned. The trees of the forest rear their stately heads in strength; but each hard outline is softened by waving leaves, and spring buds and blossoms rest here and there. The most barren mountain that lifts its leaden weight against the sky is crowned by light-winged clouds, ever changing, ever varying its light and shadow. Even Sahara's wastes boast their spots of exceeding beauty—the beacon-lights of many a weary caravan, and often the homes of a dense though solitary people. A wilderness of waters bathes the shores of either continent, where dark waves ever flow monotonously. But the oases of these seeming wastes, how numerous they lie! How rich in vegetation and the coral wealth of the unknown deep! Earth is altogether lovely, and a beautiful system underlies the fair surface; but too often it is a loveliness unappreciated, a system unsought. The yellow-sanded streams of the modern Ophir, and the mines hidden in its wealth of mountains, gain more admiration than sublime Niagara, and I had almost said than Mont Blanc itself. No wonder, then, that the crowded haunts of men are more in their thoughts than nature in the fullness of her glory beyond. Yet can these exalt the mind, given us to form and

adorn, like the contemplation of the virgin works of her Creator ? From primeval chaos He called land, and the East and the West rolled back their dark waters to give it room. Bold, rugged, but broken mountain chains oppose a western barrier to the sea, and alternate hills and valleys, rich in soil, breathe a softer language to the fertile plains which they form a low range to protect on the east. Does the sordid aspirant to wealth and position ever consider that the gold he seeks is found mostly in mountains running north and south ? Let him look for an instant at this range just spoken of, at the Andes and Eastern Ural mountains, and to the long hidden treasures of California and Australia ; is there not, even to him, an awakened interest in this evident working of an unknown law.

The broad, salubrious table-land of the home of the Montezumas, which the immortal Humboldt determined, presents another new feature in the knowledge of the world as it is—a feature that finds its like in the plateaus of Central Asia and Southern Africa. Low lands on one hand and mountains on the other, running through all the varieties of deserts, meadow lands, selvas, and river basins, changing from the rich vegetation of the Alleghanies even to the glacier covered Alps—these complete a structure of the continent more important than any divisions of man, because the very foundation and cause of them. Europe, the most irregular of all the continents in form, presents no central mass of land, so to speak, of any extent, and her distinct nations are as numerous as her productive islands and her peninsulas. Africa shows to us one leaden extent of desert, and highland, and mountain, and her historic dearth is only equaled by that of her twice-quoted Sahara. Asia is rich in plains and lowlands ; and as the sturdy oak sends branches to the air, so she does to the sea in the shape of Arabia, Hindoostan, and Farther India, and lesser ones upon the east. Primeval nations had their abode here—the simplicity of the continental structure harmonizing best with the pastoral habits and first growth of earth's people. Its title of the “Cradle of Mankind” is fitly given, fitly borne. For a moment let us give attention to the great “Dorsal Ridge,” the chief characteristic of that continent, upon either side of which are ranged her spreading plains, highland and lowland, rich and barren, savage and civilized. This range, frequently broken, yet preserving its character throughout, is formed by the Himalaya, the Caucasus, the Balkan, the Alps, the Pyrenees, and the humbler

Cevennes east of these. It divides Asia and Europe into two worlds, as distinct in character and as different in population as ancient Greece and the New World of the West with its native hunters. The fertile peninsulas of the south experience the benefit of the tropical winds which pass, uninterrupted, to this mountain barrier that meets and cools them, causing general, frequent rains, still further to enrich these lowland gardens. Chilling polar winds come sweeping down the outspread highlands of the north, and fiercely break against the adamantine wall which prevents their devastating the regions of the vine—the luxurious kingdoms of wealth and refinement, of learning and warlike glory, which have existed almost since the world has stood. Centuries ago the barbaric hordes of the north swept down as fiercely against the immovable hosts of Rome—"Rome, that sat upon her seven hills, and from her throne of beauty ruled the world." Then the Grecian sages held the concentrated learning of the globe; and, to compete with them in this, was as far from the thoughts of these northern savages, as from those of the benighted African of to-day. The same distinction, existing from the foundation of the world, obtains now between the nations of Persia and India, and the fierce, uncivilized clans of Tartars and Russians. All this from the position of a single mountain chain, and the elevation of adjacent lands! Yet who, except the thinking few, ever sought for causes such as these, when they found the Holy Land and the home of the first family of men in Western Asia, or traced the steady growth of Europe in a commercial character? When they looked upon the single great kingdom of Africa—Egypt on the banks of the Nile—who has gone very far beyond the characteristic "Yankee guess-work," or, at most, the question of its vicinity to sister people across the Mediterranean and farther east?

The Mongolian of Eastern Asia: can we find no cause for his peculiar character in the land of his birth and greatness? This portion of Asia gives a central table-land of trapezium-like form, which spreads itself east and west, north and south, till its sweeping course is broken by lofty walls of mountains, whose towering peaks seem like watch-towers on the time-honored ramparts of the lone kingdom within. On the north the Altai, on the east Klingen, on the south Himalaya, and the western Bolor form a circling barrier, whose gates are immoveably locked with Polar ice and snow, except the solitary one of Zungary. In all this vast mountain broken inclosure, no wealth of vegetation relieves

the weary eye, only cold, dry winds, and wastes, and clouds of shifting sand that break over one like the waves of the restless sea. One spot alone stands forth as an exception; it lies in Eastern Turkestan, along the vine-clad banks of the Tarim, where the cotton-tree grows in beauty. Broad, low plains slope everywhere to the sea from this mountain series, across which wide, blue rivers flow, that rank with the largest on the earth. The Eden-like vales of the southern streams have been rich in the glory and refinement of the generations they have fed; but the mountain-bound kingdom above them bears a people fierce and warlike, and steadily refusing to be civilized. Justly is Eastern Asia entitled the "country of contrasts;" of huge, isolated, and strongly marked lands, each a world of itself alone. Here lives and reigns the Mongolian. Individuality so strongly marked upon the soil, is not lost in its occupants. The Mongolian is a nation of patriarchs. Melancholy in temperament, groveling in intellect, sagacious, but without the power of generalization, he lives on; the shepherd the nature of the soil compels him to be; all his social relations of the simplest character and imposed only by nature. The Indias and China proper, by their mild fertility, invite the foundation of societies which gradually attain a state of cultivation impossible in the inner lands. But even here the characteristic of the people and the continent—the patriarchal principle—is preserved. China now presents the purest type the world has ever witnessed of a high civilization under the domination of this order of rules. But this is an exception to the general character of the continent, with which let us now contrast the condition of Hindoostan.

Of an energetic temperament, soaring intellect, power of generalization, and, more than all, of exalted religious sentiment, the Hindoo is the very opposite of the Chinese; and in his present condition and prospects we have an opportunity to observe the effect of this eastern tropical climate upon a nation sprung from the west and possessing all its characteristics. Very soon after the transplanting of this foreign stock, the intuitive faculties begin to predominate in his nature; the real world around him begins to lose its importance, fades, disappears in misty distance. Works of philosophy, poetry, and religion appear; but in all these is no allusion to his mode of life, government, or history. Everything is visionary; everything breathes the cloudy atmosphere of pure imagination. Yet, even in their deep degradation, the Hindoos preserve their superiority over the Chinese. Fallen as they have

become, there is a stamp still about their defective cultivation which marks a noble nativity. It is still the high intelligence and activity of the East, though enervated and brought very low by its distant place of sojourn. One more analogy, or characteristic if you prefer the term, and the last here. These gorgeous nations of the East at our earliest historic date, were what they now are, a cultivated, intellectual people. Three thousand years ago India was rich in her Vedas, and what kind of nation must this have been for the production of works of religion and philosophy such as these? A far-famed kingdom, surely, it has stood; richly gifted in mind and in social state. Such, Alexander finds it, and the European conquest brings no change to light. Thus it is, too, with China. Ages before the Christian Era she stood where she now stands; she has neither gone forward nor back in the subsequent long course of centuries. Is there nothing here to astonish us? Three thousand years and these nations have suffered no material change in their mode of existence; have learned nothing, lost nothing. No great men, breathing ambition in every act, have come to disturb their long-established equanimity. No fertile brain has electrified the plodding masses with its new and startling discoveries. Neither has this half-dormant state robbed them, as generation succeeded generation, of the life which they had before. There they stand, like the bold features of the soil, unchanged; and who shall change them? Conquering hosts sweep over their lands, and, like oil upon the waters, leave no trace behind, just as those immense plains might receive the miniature states of Europe and hardly alter their own distinctive character. Like the century-living oak, to which we have likened it, the country lives on to see its branches shoot off to the four winds and strengthen in their own strength, and still increase in their own growth with twigs, and leaves, and buds, and fruit, ever changing, ever new.

If this cursory view of one of the secondary races presents any points worthy of a second glance—if the resemblance in character between lands and their inhabitants is here strikingly shown, what may we expect from the study of the noblest of races—the white or Caucasian? Of its birth-place on the plateau of the West, which is more open to communication, more favored in climate, in a word, softened in all its features? From this plain springs the most perfect type of nations in body, in mind, and in history, Upper Armenia and Persia having nursed its infancy. The an-

at the age of "nine or ten years, and from this to fourteen." "Children must have a love of learning, (i. e.) of the actual acquiring of additional knowledge and aptness, and powers of intellectual application, before they can make progress in any branch of learning whatever." And yet, he says, in the very sentence, that "there is nothing like exercises in Arithmetic and Logic, to strengthen and enlarge the reasoning and inventive powers in early youth." Grant the truth of the assertions, that Arithmetic and Logic do strengthen and enlarge the capacities of the mind, and that children "must have a love of knowledge," &c., before they can progress rapidly in knowledge, yet who does not see the fallacy of the position that a child of *nine* or *ten* years of age is more likely to fall in love with *Logic* than with Latin or Greek! Hence, where is there any just ground for giving one the preference over the others, as a means of mental discipline and useful knowledge? The same objection, I think, will hold equally here against Logic and its kindred branches, that is urged against Latin. The gentleman's argument proves *too much*, and, consequently, is worthless.

But perhaps the writer has discovered a new method of interesting the minds of children in the mental sciences, by commencing Logic, &c, at the same time, and coupling them with the study of Arithmetic. If so, might not those who are advocates for the languages, here derive a useful hint for the early and successful prosecution of the classics by a similar course.

Again, he says, "nothing is more improper than the committing to memory of words and of arrangements of words in a foreign language, which, to children, are meaningless sounds. The reiteration of this is tedious and disgusting to them, and they gather from it no knowledge of things that interests them."

All this goes to confirm the opinion already expressed; that the writer either never had a teacher of the languages at all, or else a very bad one. Who that knows anything about the study of the classics, does not know that it consists in infinitely more than "the committing to memory of words, &c., which, to children, are meaningless sounds?" If an individual should attempt to commit to memory the entire Latin or Greek Lexicon, under the impression that it must be done in order to understand the language properly, it would truly become a jumble of "meaningless sounds," and he would make a fool of himself. As well might you attempt to prove that "Webster's Unabridged" must be swallowed entire, before a

child can obtain a correct and thorough knowledge of English Grammar and the English language.

Further, we are told that "traveling over a few Latin or Greek words every day, discloses nothing new or pleasing; it does nothing towards gratifying their curiosity; it is idle, empty mummary." If the author means by this that the *proper* study of Latin and Greek (without reference to *his peculiar* method) is attended with such results, I deny it most emphatically, and appeal, for the correctness of my position, to every classical teacher in the land. Is it "idle, empty mummary," to be able to read, in their native freshness and beauty, the eloquent orations of Cicero and Demosthenes; the glowing and enrapturing poetry of Virgil and Homer; the biting satire of Horace and Juvenal; the entertaining histories of Livy, Terence, and Herodotus? Or to learn divinely inspired principles from the rich and exhaustless lore of the Church Fathers, and the Institutes of Calvin and his cotemporaries? If so, then blot out all education—all training of the mind to think and act for itself—and let tradition be our only guide. Let it be made known to all seekers after wisdom that knowledge obtained second-handed is better than that derived from the pure, original source.

But what is most singular of all, in this connection, is, that an objection should be raised on the ground that the *moral* training of the child would be neglected. Perhaps the writer imagines that meddling with books that tell us so much about the strange gods of Greece and Rome, would have a tendency to lead the mind away from the true God, and, consequently, exert an immoral influence. For, why the moral training of a child can not be as sacredly cared for whilst studying the languages as anything else, I can not understand. Hear him: "But to give this the precedence to moral education, shocks all common sense. To prefer this silly flouncing of foreign and dead lingo, before moral education, indicates a depraved taste and a depraved heart."

"Some, however," he tells, in the next sentence, "are so enamored of the idea of making linguists of their children, and so anxious for the attainment, that they buy this vain futile smatter of unknown languages, while their children can not spell nor pronounce their own, at the expense of their morals, which they take no pains to cultivate any otherwise than sometimes giving them a piece of advice or admonition in terms that are suited to the comprehension only of College learned people, which has as much effect as to talk Greek to a horse." This is clear as mud, and about

as ridiculous as the preceding. To talk of *buying* Latin or Greek as you would any article of merchandise!!

A great deal more might be said, not only of the fallacy of the writer's positions, but also of the incongruity, weakness, and imperfection of the composition as a whole. But let this suffice.

I have only to add, in conclusion, that I am sorry to see any avowed friend of education, in this day of schools and colleges, rise up to speak in unwarrantable terms against incorporating the languages, especially the Latin, as far as may be possible or expedient, with the other branches in our common high schools, as well as colleges. In all European countries where any pretensions are made to thoroughness and scholarship, the languages hold a prominent place through the entire course of instruction, commencing as early as the age of *ten*; so that I think we, in following the example of our illustrious predecessors, might be allowed to commence somewhere between *nine* and *fourteen*—the limit prescribed by our learned author.

I contend that no one can become a thorough or finished scholar without a knowledge of the classics; nor can he attain to the same degree of perfection or eminence as a scientific or professional man, without at least some acquisition of this kind. I would have all men scholars, in the true sense—masters of their own language; and at the same time trained in the classics, as far as possible. And the time when I would recommend a commencement of the languages, would be just as soon as the student is prepared to enter earnestly and intelligibly upon the study of English Grammar.

CRITIC.

EXTRACT FROM A REPORT ON THE EDUCATIONAL CONDITION OF DELAWARE COUNTY.

The amount of the public fund for the County was \$4,410.75 and the whole number of children between the ages of 5 and 20 years was 5,846. Dividing the funds among that number of pupils will give each one 75 cents; dividing it among those actually attending public school will give each pupil \$1.58 as the amount provided for his tuition. Or dividing it among the 85 districts, will give each district \$51.90 for the support of Free Schools, a sum only sufficient to employ Teachers at \$30.00 per month,

(which should be the minimum wages of competent Teachers,) one month and three quarters. The average length of the terms of the Free Schools last year was two months and seventy-seven hundredths; teachers' wages being, for male \$22.10 and for female \$9.95 per month. These facts are much to be deplored when we consider that these are the only means provided for the support of schools, and the only ones made use of for the education of the majority of the youth. The average length of schools was two months and seventy-seven hundredths; the average attendance of each pupil would be much less. This, surely, is dealing out knowledge in homeopathic doses; taking, in connection with this fact, the incompetency of the teachers employed, which will be referred to hereafter.

There are, however, private schools in various parts of the County that afford opportunities of instruction to a very limited portion of the children. It is a fact that will not generally be disputed, that our schools at present will not compare favorably with the schools as conducted ten or fifteen years ago, considering the improvement of the country and the consequent demand for a more thorough system of instruction. The public school-fund at that time was very limited, and the people depended more on private enterprise for the support of their schools. The teachers employed were men of practical common sense, who commanded wages that were higher in comparison with the wages of persons engaged in other occupations than those commanded by teachers now. At present the people depend on the public provisions made for the support of schools, and make no further provisions for the education of their children. The rapid growth of the country, and its increasing facilities for wealth, have inspired the people with a spirit of speculation, and the public mind is diverted from educational interests. Young men more liberally rewarded pecuniarily in other pursuits, are discouraged from qualifying themselves for the business of teaching, and many of those engaged in the business have left it for more lucrative employments. The short terms of school, too, discourage teachers and force them to other occupations, affording them employment for only a few months in the year.

This is a state of affairs that speedily demands a remedy, which can easily be effected by a more thorough provision for the support of schools. This can be made without a grievous burden on any portion of the people. In addition to the fund arising direct-

ly from the appropriations of the State, there is a tax of ten cents on each one hundred dollars of property, and a tax of fifty cents on each poll. There are 4,046 tax-payers in the county; of that number more than one-half pay tax on less than \$500.00, or less than fifty cents exclusive of poll tax; about one-fifth pay tax on less than \$1,000.00, or less than one dollar not including poll tax; the remainder pay tax on sums greater than \$1,000.00. An average tax on the valuation of 1856 would be about 75 cents to each tax-payer, exclusive of poll tax.

It is conclusively shown in the report by the Superintendent, from reasonable data, too extensive to insert here, that an additional tax of ten cents on the one hundred dollars would be sufficient to support schools for six months in the year throughout the State.

The tax, even at that rate, of more than one-half of the tax-payers of this County, would be less than one dollar, not including poll tax. How very trifling this increased tax, compared with the result of such an investment.

A glance at the character of a majority of our Teachers presents a dark side of the picture. We have seen that last year the number of districts was 85, and the number of teachers 65, showing that 20 districts were unsupplied with teachers. Of the character and qualifications of the teachers of that year I can not speak positively, not being in possession of the reports of the examiners at that time; but will present the substance of the reports of the examiners of 1855, which will be a tolerably correct exponent of the teachers of last year.

There were 65 applicants for license; of that number, 14 were refused as being totally incompetent; of the remaining 51 that were licensed, not one-half were capable of teaching English Grammar; and not one-half of the remainder would have received a license if the examiners had been strict in following the requirements of the law. Not one in five had qualified themselves with reference to the business, and only designed engaging in it for a relaxation from the labors of the farm or shop through the winter season.

This scarcity of competent teachers will continue to exist until more means are provided for the support of schools; until inducements are offered to call young men and young ladies of talent into the field. We must pay our teachers, else we never can expect to have anything but mere novices in the work. \$22.10 per month, the average wages commanded by male teachers last year,

(and board to be paid out of that,) is a poor inducement for young men to prepare themselves for teaching, or engage in it after they are prepared, when they can save more money working by the month on the farm, or cutting wood by the cord. Most men work for money and engage in those pursuits that pay the best, hence, teaching being an unprofitable business, is abandoned for other employments. We are told that in many localities the pupils are not advanced and do not need thoroughly qualified teachers. But when will they be advanced if teachers are employed ignorant of the principles that lie at the beginning of an education, and of the capacities and inclinations of the minds under their tuition, with but a mere smattering knowledge of what they do profess to teach? Is it sufficient that a person only be in possession of a little more knowledge than the child, to become its educator; to assume the responsibility of developing the intellect in all the different channels of which it is capable? Would you go for counsel to a lawyer with only a little more knowledge of the law than yourself? Or to a physician unskilled in his profession to heal the maladies of the body? Are not unskillful teachers a positive injury to their scholars rather than a benefit, instructing them wrong, making it more difficult to eradicate the errors they have implanted than to instruct them from the beginning?

In 1855 there were 16 school-houses built at a cost of \$2,795; in 1856 there were 22 houses built, costing \$9,262; the average cost being \$315. These houses are nearly all frame; a part of them are neatly built, and tolerably well arranged, furnished with desks and black-boards, and means of ventilation. The greater portion, however, have been meanly built, without any display of taste or judgment in selecting sites; any uncouth, out-of-the-way corner, having been selected, without reference to comfort, convenience, or neatness. They are furnished with benches, many of them, without backs, and I am not sure that a part of them are not made of rails. The writing-tables are rickety; no black-boards; no means of ventilation except by open floors and cracks about doors and windows. In short, they are not comfortable, to say nothing of their inconvenience and want of proper arrangement. Some of the best of the old houses are still occupied, while a part of the districts are without houses. Although many of the school-houses are not what we would desire to see, yet they are a great improvement on the old log houses with split poles and rails for seats, writing-tables resting on pins in the walls,

fire-places occupying six or eight feet in one end. We would hardly expect to emerge at once from the condition we were placed in by stern necessity; but we must wait patiently, and labor assiduously until our resources are more fully developed, when the people can turn their attention to those things instead of having the whole mind engrossed with clearing fields, tending their farms, and other money-getting cares.

The Township Libraries of the county contain 4,429 volumes, judiciously selected, designed to accommodate the different classes of readers, and furnish each person with reading matter suitable to his peculiar tastes or wants. The books are distributed proportionately between the different townships according to population. The libraries are open to all throughout the year. The number of volumes taken out during the last year was 2,903. This is an evidence that these libraries are, to some extent, appreciated, and will, consequently, accomplish a great deal of good, by the diffusion of light and knowledge among the people.

The town of Muncie is situated near the center of one of the most fertile counties in the State, surrounded by natural advantages and favored by railroads, and in the midst of a rapidly growing country, without any other town of importance to compete with it and draw trade from it, having a population of nearly two thousand, and about five hundred children between the age of five and twenty-one years. There are no well regulated and established schools of a higher order nearer than Richmond, Indianapolis, and Ft. Wayne, making Muncie one of the most desirable locations for a high school or college in the State. But what is its condition in this respect? A sad picture, indeed, would be drawn if the truth were told. What has been and what is being done for the education of the five hundred children in this town? How many public schools have there been in the last year and what was their character? How many private schools and what portion of the children have attended them? There have been two public schools supported three months; but they were only a farce. Not on account of fault in the teachers, but because all the children in the town, of every grade, were crowded into the small school-houses, rendering it impossible for any teacher to effect an organization that would work harmoniously. Our friend, Mr. Clarkson, by indomitable perseverance and unremitting energy, has sustained a private school for the last two years, and now has a good school and a flattering prospect of future success.

There have been other private schools sustained for a short time, but they have been attended by a very small portion of the children of the town, leaving the greater portion to be educated in the streets.

EXTRACT FROM AN ADDRESS

Delivered by M. SIMPSON, before the Parke County Teachers' Association, October 10th, 1857. Published by order of the Association.

MR. PRESIDENT :—In obedience to the call of the Parke County Association of Teachers, I now propose to lay before the Association some of the experiences and reflections arising from a discharge of the duties of School Examiner. Having held this office for seven or eight years, and having examined twenty or thirty teachers each year during that time, your respondent has had some opportunity of acquiring a knowledge of educational matters as indicated by the character and qualifications of applicants for license to teach our common schools. And here I may remark, that among all this number of teachers, I have found only four or five who declared it their determination to make teaching their *permanent* business or avocation for life.

By the law of Indiana, Township Trustees are forbidden to employ, in any Common School, any teacher who is not competent to teach Orthography, Reading, Writing, Arithmetic, Geography; and, by plain implication, Examiners are forbid to *license* any one who does not come up to this standard. This standard is not very high, and yet, so great was found to be the scarcity of applicants who could be licensed under this test, that the State Superintendent issued his advice or direction, that in view of this scarcity, Examiners should license for each of these branches, as the applicant should be found qualified to teach, specifying the branches in the certificate given. Under this rule I have licensed twenty or thirty a year, many of whom were poorly qualified to teach, and to whom certificates were given with some misgivings and much reluctance. Indeed, candor requires me to say, that, in strict propriety, not more than one in every four of all these, ought to have been licensed. But what were the people to do? They must have teachers of

some sort; "half a loaf is better than no bread," and it was thought better to license these, than that our people should have no schools at all. In my practice, I have endeavored, in the wording of the certificate, to indicate what I conceived to be the grade of qualification; thus: when the qualification was poor, barely passable, the form used has been—"tolerably qualified," and length of time, 6 months; when better, or middle rate, "qualified," and time 12 months; and when good or decidedly good, "well qualified," and time, 12, 18, or 24 months. In eight cases only, have I felt warranted to use the phrase "well qualified." In one where I had given a certificate containing the word "tolerably," the holder of it said—"if you had not put that word in, I could have got three dollars a month more for teaching." Four applicants have been rejected for incompetency, and had I known the fact in time, a few of those licensed would have been rejected, on account of immoral character.

In the department of spelling and pronunciation, many were found respectable, though a considerable number, if they did not begin a certificate with *sur*, would hesitate to spell license with a *c* or an *s*. One young gentleman presented a slip of paper containing two lines of his writing, in which were five misspelled words. His name, which begins with the Scotch prefix *Mc* (*Mac*), was signed at the bottom. In this, he had begun the principal name after *Mc*, with a small letter, instead of a capital. He was asked, "Is that correct?" "That's the way Dad writ his name." "He was not a teacher, was he?" "No, but he has got good lurnun." His five misspelled words were then pointed out. He denied that they were wrong. The dictionary was then appealed to, and he still insisted that his way, though differing from the dictionary, was just as good—it made the right sound. "*What!*" said I, "*you* talk about teaching, and net yield to the authority of the dictionary!" *His* way was just as good—he had a right to his own way of spelling when it sounded right. He was *too* wise. He was civilly told that he had better go to making spelling books or dictionaries, and was dismissed without a certificate.

Though many of our Parke county teachers do not show themselves, in spelling and pronunciation, to be well qualified to teach our common schools in Indiana, yet they need not be discouraged. Illinois is just over here! The chair of Moral Philosophy in Knox College is probably vacant! Each of them would make a worthy successor to G. W. Gale, Professor of Moral Philosophy in that

institution, judging by a late account given in one of our newspapers. It seems that a quarrel had sprung up among the Faculty, and G. W. Gale, Prof. of Moral Philosophy, wrote, in an evil hour, to his village printer, a letter for publication, to set himself right.

The wicked and irreverent editor did not correct the Professor's manuscript, but published the letter just as he found it, *verbatim, literatim*, word for word, letter for letter. Here are some specimens of that Professor's orthography :

Vulgar Method.

vacations,
formally,
volunteered,
apologizes,
committee,
recommending,
professor,
courteous,
salary,

Gale Method.

vacasions.
formerly.
voluntered.
appologizes.
committe.
recomending.
professor.
courtuous.
salery.

Now, bad spellers must not sink into discouragement. Let them hasten to make application for that vacant chair of Moral Philosophy, or for some other professional chair, redolent of bad spelling.

Again : in examining a lady teacher, the subject being Geography, the colloquy ran about thus :

"How many degrees of latitude is it from the equator to each pole?" "Sixty, isn't it?" "No." "It's one hundred and eighty, isn't it?" "No, it is only ninety." "I had forgot; my memory is a little short." "What is the circumference of the earth?" "Can't remember." "Where is the river Nile?" "In New York, isn't it?" "No, it is in Africa." "Indeed, I thought I knew more." "What waters are connected by the straits of Gibraltar?" "Can't remember—my memory is not very good." "Which is the largest river in Europe?" "The Amazon, isn't it?" "Oh no, you are not correct—that is in South America." "La! I ought to have known that!—I used to know it."

Of course, a few intervening questions, correctly answered, are omitted; otherwise, this is substantially an actual conversation.

The *sterner* sex make their blunders too; and, in justice to my lady friends, I must say, that when *men* blunder, they can not *escape* from their blunders so adroitly nor so gracefully as *women* do. Many of the best spellers, some of the best arithmeticians, and a

majority of the best readers I have examined were females. The best rhetorical reader I have found was a lady teacher.

In the department of English Grammar, the *worst* deficiency has been found. And this, I apprehend, arises partly or chiefly from the multiplicity and *great* diversity of text books in this branch. It is a serious evil—many of the books are totally unfit for the school-room. An applicant for a certificate presents himself. Ask him what system or author he has studied, and his answer is—“Well, I have studied some in Kirkham, some in Bullion, and Greenleaf; I have studied Brown and Butler, too, some, and I have *just saw* Pinneo’s—they say that’s a good grammar.”

Now, Mr. President, were you to *examine* that grammarian, you would not, perhaps, give *three copper cents* for all the grammar he has *about* him—or rather *in* him. Yet, I *have* found a few passable grammarians. Confusion was scarcely more rife at the tower of Babel on the plains of Shinar, than it is now, in this country, among our authors on English Grammar. Here I would like to say a great deal, but I grow weary and wearisome, and must therefore close.

THE SCHOOLINGS OF SOCIETY.

The Geologist in his explorations finds far inland a pebble worn and rounded, and at once he says “the *sea* has been here.” He finds the surface of the naked rock grooved and furrowed as if by the graver’s chisel, and he knows that sometime in the past centuries the ponderous glacier has passed over it. The stone is dug up from the quarry, and deep in its solid substance is imbedded a footprint once stamped upon the yielding clay. Upon everything about us we find the traces of mighty agents whose shaping power has left its lasting impress; upon everything some marks of the mould into which it was thrown; but most of all upon the living, thinking human throng that rolls, and swells, and goes down to the dust about us. Now and then, upon some prominent character, standing out in bold relief by the whiteness of its virtue or the blackness of its vice, we see this impress of society and recognize the hand that set it; but, usually, we overlook the many influences that have been marring the structure, and say, when we

look upon its deformed proportions, "strange that such a work should come from the Maker's hand!"

It is a false and dangerous philosophy that would make man a mere creature of circumstance, without responsibility because without power to withstand any current that sets against him; but even resisting the current, leaves, sometimes, a disfiguring mark. A writer, whose name I have forgotten, has put into the mouth of a man, stained by many a crime, these words: "*Society has sent me to school, and society must profit by the lessons.*" Look about you and see what these schoolings are, and then read in the records of wickedness filling every paper how the scholars profit by their lessons. A few months ago the papers were all shocking the reading world with accounts of the murders committed by one man, Ward, and when for the last one he was brought to justice, and sent, with his crimes upon his soul, to the tribunal of eternity, every one said it was well, and wondered that such a wretch ever lived on God's earth and shared in our sweet humanity—"our angel nature," the reformers call it.

Did any of the zealous Pharisees think of the share they might have had in those murders? Did any of them read his life and see who sowed the seed that brought forth an hundred fold? Left motherless at seven, who taught him to say, "lead us not into temptation?" Thrown out upon the world by a father who, after cursing his child with an unasked existence, failed to hallow that existence with love and watchfulness, how could he ever fulfill the command, "honor thy father?" So there the little plant that should have been carefully guarded in the garden of home, was left upon the open moor, and somebody stepped on it and dwarfed it forever. Society sent him to school—I wonder who were his teachers. Good, moral citizens, upright, honorable men, taught him selfishness by showing him how little they cared for the well-being of the laborer that did their bidding. Professed christians taught him hypocrisy by taking upon their lips the beautiful words, "*Our Father,*" and then turning, scornfully, from the human brother they had by the very petition recognized. And who can tell what other lessons he learned, till in the poor, warped soul there was not left an impulse unperverted. And, reader! when we say *society*, remember that means you and I. As the great wheels go turning round, crushing all beneath them, we go with them adding our might to theirs. Have we ever stretched forth a helping hand to save any of the probationers? What les-

sons are we teaching in the great school! For there will come a day to each one of us when it will give greater joy to have taught one tongue to speak the language of virtue and right than to be rich in all the wisdom of the world's false maxims. Would it not be beautiful to be the dew of the moral world, falling, when the heat and burden of the day is past, upon the choking, dusty flowers, bringing something of the cool and freshness of heaven; or even a torch-bearer to light the world back to the peaceful childhood to which it must return before the "kingdom come and the will be done."

INDIANAPOLIS, NOV. 30th, 1857.

E. C. H.

MATHEMATICAL DEPARTMENT.

W. D. HENKLE, Editor

With any radius less than the radius of the given circle, describe a circle so that it shall touch the given circle internally. Then assume any point in the circumference of the given circle and describe another circle so that it shall touch the circumference of the internal circle, and the circumference of the given circle in the assumed point. We have, now, three circles, and wish to describe a fourth, which shall touch all of them—two externally, and one internally. The problem, of which this is a particular case, was one of some celebrity among the ancients. It is said to have terminated a treatise of Apollonius, entitled "*De Contactibus*," which has been lost. Francis Vieta restored this work, and his restoration was printed among his works which were published in Leyden, 1646. Our edition is a translation by John Lawson, printed in London, 1771. See also *Newton's Principia*, Lemma 16, B. 1; *Newton's Algebra*, p. 181; *Simpson's Geometry*, p. 254; *Oreswell's Euclid*, p. 376; *Hutton's Mathematical Recreations*, p. 165; *Geometry* in "Library of Useful Knowledge," p. 117; *Hampel's Geometrische Constructioner*, p. 191; and a paper on the *Tangencies of Circles and Spheres*, by Major Benjamin Alvord, in vol. 8, 1856, of the Smithsonian contributions.

[*Jacob Staff* has furnished a solution of No. 39, which is very simple. The simplicity results from his assuming that the centres of two of the required circles are in radii of the given circle that are perpendicular to each other.]

No. 48

Will receive attention in some future number. *Mr. Alsop* has sent a full discussion of it.

Nos. 49, 50, and 51.

Mr. Alsop has sent solutions to all these. His letter was delayed so that the acknowledgement could not be made in the last number.

SOLUTION OF NO. 53.—BY JACOB STAFF.

If x = the quantity of water in the hold at first, z = the hourly leak, t = the time for A to empty the hold, $6y$ = the gallons pumped by A in an hour; then $5y$ will be the gallons pumped by B in an hour.

$$\text{Then, } 6ty = x + tz \quad (1) \quad \frac{x + tz - 5ty}{6y - z} + t = 13\frac{1}{3} \quad (2)$$

$$\frac{x + 3\frac{3}{4}z}{11y} = 3\frac{3}{4} \quad (3), \text{ by both working together. A would}$$

$$\text{pump } \frac{6}{11}(x + 3\frac{3}{4}z), \quad \frac{x + tz - 5ty}{6y - z} = \text{the time for A to finish.}$$

$$\text{and } \frac{6}{11}(x + 3\frac{3}{4}z) - \frac{x + tz - 5ty}{6y - z} \text{ or } 6y = 100 \quad (4)$$

$$\text{From (3) } y = \frac{4x + 15z}{165} \text{ which substitute in (1) and } t = \frac{165x}{24x - 75z}$$

With these values of y and t in (2) and (4) we get

$$\frac{660x(7x - 15z)}{(24x - 75z)^2} = 13\frac{1}{3} \quad (5)$$

$$\text{And } \frac{\frac{3}{2}(4x + 15z)(24x - 75z)^2 - 6x(4x + 15z)^2}{(24x - 75z)^2} = 100 \quad (6)$$

Put $x = az$, and reduce (5) and we have a quadratic which gives $a = 10$.

In (6) write $10z$ instead of x , and we have a simple equation, $z = 120$, hourly leak. Consequently, $x = 120$ gallons in the hold at first. Time for A = 10 hours at 240, and B 200 gallons per hour.

[*Joel E. Hendricks*, by working for the influx per minute, gets a quadratic with very large numbers. His answer is slightly different from *Staff's*, namely, 1202.2402 and 120.2230.]

SOLUTION OF No. 55.—BY JACOB STAFF.

The two birds that did not get shot would, by the natural laws "*de motu animalium*," find some other tree for a better look-out. The other unfortunate can not, in the same sense, be said to either go or remain, having lost its volition as well as its feathers. Let metaphysicians decide this point. The only mathematical analogy, in our view, is that of an imaginary quantity which lost its real existence by the skill of the algebraist who knocked the breath out of it. Our solution, therefore, may be $\sqrt{-1}$ remaining.

This we submit with some degree of diffidence, not to say modesty, as our mathematical expression for a dead bird.

[In this able discussion, *Mr. Staff* has assumed that the sportsman *killed* the bird when he *shot* it. If the bird was only wounded it is plain that the result *might* be different. We have received but one solution to this problem. Was it "*two tall?*"—ED.]

J.

Staff, by considering the distance between the Earth and the Moon to remain the same, and the mass of the Earth to be 50 times that of the Moon, gets .02444 of the Earth's mass as his result. *Also*, by disregarding the mass of the Moon, because its ratio was not given in the question, gets for his result .0249 of the Earth's mass. His proportion is

$27^2 : (27\frac{1}{2}\frac{22}{100})^2 :: 1 : m$, the increased mass of the Earth, whence $m=1.0239$.

He says: "If the mass of the Moon is taken into account, it will materially modify this result."

H. B. WILSON'S PROBLEM.

There is a tree, six inches in diameter, standing in a plain, round which there is wound one hundred yards of twine. How far would a person travel who, taking hold of the end of the string, and keeping it straight, should walk forward in a curve till the whole string was unwound? Can the path or curve be represented by a succession of semi-circles?

N. B. The magnitude of the twine may be disregarded.

SOLUTION.—BY THE EDITOR.

The curve, whose length is sought, is the involute of a circle. *The length of the path described at any time is equal to the square of the length wound off, divided by the diameter of the circle.* This result, which is obtained by the aid of the Integral Calculus, is remarkable for its simplicity. Applying it to the present problem, we have, for the distance required,

$$100^2 \div \frac{1}{8} = 60,000 \text{ yds} = 38 \text{ miles, } 29 \text{ rods, } 1 \text{ foot, } 6 \text{ inches.}$$

The curve can not be accurately represented by semi-circles, although we might get a close approximation in that way.

After writing the last sentence, we concluded to see how close the approximation would be in this case. We supposed that if we should describe a semi-circumference, with 100 yards as the radius, a circumference, with a radius equal to 100 yds, *minus* the circumference of the tree, a circumference with a radius equal to 100 yds.—2 times the circumference of the tree, and so on, and find the sum of all these circular areas, that the approximation would be tolerably near the correct result. Dividing 100 by $\frac{1}{8}\pi$, the circumference of the tree, we get $\frac{600}{\pi}$ for the whole number of radii used. Then finding the sum of these radii, which form an arithmetical progression, of which the first term is 100, the last $\frac{1}{8}\pi$, and the number of terms $\frac{600}{\pi}$, we get $\frac{30,000}{\pi} + 50$, which multiplied by 2π gives $60,000 + 100\pi$ as the sum of the lengths of all the circumferences. From this we must take half of the circumference whose radius is 100. This leaves 60,000 yds.; the same result as by Calculus. We did not expect that this process would give the *exact* distance, but, nevertheless, it does. Let us now see whether it will hold good in all cases. Let r = the length wound off at any time, c = the circumference of the tree, and d = its diameter.

Here we have r for the first term, c for the last, c for the common difference, whence $\frac{r}{c}$ equals the number of terms, and

$(r+c)\frac{r}{2c}$ the sum of all the terms. Multiplying this sum by 2π we get $\frac{\pi r^2}{c} + \pi r$, from which deducting πr , the semi-circumference of a circle whose radius is r , there is left $\frac{\pi r^2}{c} = \frac{r^2}{d}$, since $c = \pi d$, which is the same result as that obtained by Calculus. It should

be remarked that $\frac{r^2}{d}$ is independent of π , and that we have found the *exact* length of the sum of certain circular areas, although the length of the circumference of a circle can not be accurately ascertained.

PROBLEM No. 59.—BY BENJAMIN HEADLEY.

A professor wants to know, if a stone should be hurled perpendicularly into the air, with such force that it would pass through 35 feet of space the first second, how high it would ascend? And if another stone of equal size and weight should be dropped at the same instant from the summit of a tower at just the elevation which the first stone would reach, at what point the stones would pass each other?

PROBLEM No. 60.—BY G. W. HAYES.

There is a conical pole, 80 feet in height, and 20 inches in circumference at the bottom. How many yards of thread would it require to pass spirally from bottom to top, passing around the pole once every four inches?

PROBLEM No. 61.—BY JACOB STAFF.

Three boys have sixty apples. If x , y , and z represent the shares respectively, then $x^m y^n z^r = a$ maximum. What is each share, m , n , and r being given.

PROBLEM K.—BY SAMUEL ALSOP.

Required the velocity which a body would acquire in falling from an infinite distance, if acted on solely by the attraction of the earth?

KIRKWOOD'S ANALOGY.

Kepler, before the days of Newton, discovered that "*the squares of the periodic times of the planets are as the cubes of their mean distances.*" The discovery of this law, as well as the two others, that the planets move in elliptic orbits, and describe equal areas in equal times, is doubtless due to the passion which Kepler had for finding out harmonies in nature after

the manner of the Pythagoreans and Platonists. In 1596, he published a book entitled *Mysterium Cosmographicum*, in which he attempted to show why the planets are six in number. He was, for some time, so charmed with this book, that he said he would not give up the honor of having discovered what was contained in it for the Electorate of Saxony. We have another instance, in the case of the celebrated Huygens, of this fondness for speculation, when he discovered one of Saturn's moons, which, along with the Earth's and four of Jupiter's, made six, the same number as the primary planets. Six being a perfect number, that is, one equal to the sum of its aliquot parts, one, two, three, it was in vain to look for any more planets.

Modern discoveries, which have extended the number of primary planets to more than *fifty*, and the number of secondary planets to more than *twenty*, have, of course, long since dispelled such notions; but, on the other hand, they have served to confirm the truth of Kepler's three laws, and they now stand a monument to his memory, as enduring as the planets themselves.

More than two hundred years had passed after the death of Kepler, before Kirkwood began to attempt the discovery of a law, which would involve the rotation of the planets on their axes. His attention was first directed to the subject in 1839, and after nine years of toil, in making hypotheses, testing and rejecting them, he arrived in August, 1848, at the following:

"Let P be the point of equal attraction between any planet and the one next interior, the two being in conjunction; P', that between the same and the one next exterior.

"Let, also, D equal the sum of the distances of the points P, P', from the orbit of the planet, which I shall call the diameter of the sphere of the planet's attraction."

"Let D' equal the diameter of any other planet's sphere of attraction found in like manner.

"Let n equal the number of sidereal rotations performed by the former during one sidereal revolution round the sun, and n' equal the number performed by the latter; then it will be found that

$$n^2 : n'^2 :: D^3 : D'^3."$$

The quotation just given is from a letter dated "*Pottsville, Pa., July, 4, 1849,*" directed to the late *Sears C. Walker*. Mr. Walker presented Kirkwood's letter to the *American Association for the Advancement of Science* at its meeting at Cambridge, August, 1849. On pages 207 to 220 of the Proceeding of that body, in the Section of Mathematics, Physics, and Astronomy, fifth day, August 18, may be found the letter just referred to, together with Mr. Walker's reply, and another letter from Mr. Kirkwood; also Mr. Walker's discussion of the subject before the Section. Mr. Walker characterizes the above proportion "the most important harmony in the solar system, discovered since the time of Kepler, which, in after

times, may place their names, side by side, in honorable association. After finishing his calculations, he said, "*Whether Kirkwood's Analogy is or is not the expression of a physical law, it is at least that of a physical fact in the mechanism of the universe.*"

"Prof. PIERCE remarked that Kirkwood's analogy was the only discovery of the kind since Kepler's time, that approached near the character of his three physical laws." These transactions were on Saturday; and on Monday, Aug. 21, Dr. B. A. Gould, Jr., after repeating Mr. Walker's calculation with masses of the planets, and periods of rotation differing from those used by Walker, presented a communication which occupies six pages in the Proceedings (see pages 363 to 369). I wonder whether Dr. Gould did not use Sunday in making his calculations. If so, will those versed in ethics tell whether he did wrong?

Dr. Gould closed thus.

"Prof. Walker made a remark on Saturday, with reference to the position to which Mr. Kirkwood will be entitled, should his theory be found true. The Section seemed surprised at this remark. I do not wish to express myself strongly, but when we look back upon the labors of Kepler, who strove so many years with results so unpromising, until he discovered the laws which underlie the whole fabric of our solar system, and then turn to Mr. Kirkwood, a teacher in the interior of Pennsylvania, who, without the sympathy of kindred minds, or the use of any library of magnitude, without calling even upon the aid of strict mathematical analysis, has fixed his attention upon this one problem, and investigated it in all its bearings, until, after ten years of patient thought and labor, he has arrived at such a result as this, we can not but be struck with the similarity of the two cases; nor can we consider it as very derogatory to the former, to speak hereafter of Kepler and Kirkwood, together, as the discoverers of great planetary harmonies."

Sir David Brewster, in his opening address before the British Association, in Edinburgh, July 31, 1850, speaking of the discovery of planetoids between Mars and Jupiter, and the size of the original planet, if they are fragments of such a planet, says:

"What its size was, would seem to be a problem beyond the grasp of reason. But human genius has been permitted to triumph over greater difficulties. The planet Neptune was discovered before a ray of its light had entered the human eye; and, by a law of the solar system just discovered, we can determine the original magnitude of the broken planet, long after it has been shivered into fragments; and we might have determined it even after a single fragment had proved its existence. This law we owe to Mr. Daniel Kirkwood, of Pottsville, an humble American* who, like the illustrious Kepler, struggled to find something new among the arithmetical relations of the planetary elements. Between every two adjacent planets

*For account of Kirkwood's Analogy in the Periods of Rotation of the Primary Planets, vide *Edinburgh New Philosophical Journal*, Vol. xlix, page 165.

there is a point where their attractions are equal. If we call the distance of this point from the sun the radius of a planet's sphere of attraction, then Mr. Kirkwood's law is, that in every planet the square of the length of its year, reckoned in days, varies as the cube of the radius of its sphere of attraction. This law has been verified by more than one American astronomer, and there can be no doubt, as one of them expresses it, that it is at least a physical fact in the mechanism of our system. This law requires the existence of a planet between Mars and Jupiter, and it follows, from the law, that the broken planet must have been a little larger than Mars, or about 5,000 miles in diameter; and that the length of its day must have been about $57\frac{1}{2}$ hours."

I have also heard that the distinguished *Comte*, in his "*Positive Philosophy*," has made honorable mention of Kirkwood's discovery.

Mr. Kirkwood published in *Silliman's Journal*, in 1850, a paper on his analogy. This I have not seen. It would give me great pleasure to make some comments on the elements to be considered in testing the truth of this analogy, but the limits of the *Journal* forbid. We close with the following personal reference.

If our memory serves us right, Mr. Kirkwood was soon called to the professorship of Mathematics in some college in Delaware. Since then, I had heard no more about him until last August, at the meeting of the Teachers' Association, I incidentally learned that he had become professor of Mathematics in the State University. We welcome Mr. Kirkwood to our State with feelings of great respect, and hope he will become an active member of our State Association, and also a contributor to our Mathematical Department.

W. D. H.

EDITORIAL MISCELLANY.

OUR VALEDICTORY.

The present number closes the second Volume of the *Indiana School Journal*, and the Resident Editor takes this opportunity to acknowledge his indebtedness to the Teachers of the State for the cordial support it has received. Its circulation during the past year has come pretty well up toward two thousand, and, in most cases, the pledges made at the Annual Meeting in December have been more than fulfilled. How far its mission has been successful we can not pretend to judge; but from all parts of the State we have received most encouraging letters, and the fact that this year it has much more than doubled its circulation, is, certainly,

strong evidence in its favor. All those who were at the meeting at Madison well remember how little certainty, in respect to its sustaining itself, was felt. When, at the end of the year, its financial condition was reported, our faith had increased so much that the Association voted to sustain an agent, relying mainly for support upon the profits of the *Journal*. In compliance with that vote an agent has been sustained for nearly nine months, paid almost entirely from the proceeds of the *Journal*; and it now is not only free from debt but has something with which to commence its third year. The financial troubles which have prostrated the business of the country, have, for the last three or four months, materially decreased the revenue from the advertisements; but this loss will be, partially at least, only a temporary one. Of these pecuniary matters, however, we shall speak more definitely in our report to the Association; but as hundreds who can not attend that meeting will be interested to know the pecuniary condition and prosperity of our periodical, we have made this brief reference to it.

To some of our associate editors, especially to Messrs. Cole and Henkle, we are under the greatest obligations. Their valuable contributions have given to the *Journal* very much of its literary and scientific merit. Others of our co-editors have rendered valuable aid, while some have found so much other employment that the *Journal* has been forgotten or neglected. To our correspondents we say, your communications have often enriched our pages, and, although we have not, in all cases, published your articles, this has in most cases happened, not from a want of merit in the communications, but from a desire not to make the *Journal* too professional. Many of the articles have been of too general a character. Articles on school management, and of direct bearing upon the practical, every-day affairs of the school-room, have very rarely been received. It is true that these things can much better be taught in Teachers' Institutes; and it is to be hoped that some method may be devised to multiply these invaluable aids to the Teacher.

In regard to the *Journal*, we have endeavored, according to our ability, to make it a valuable auxiliary to the Association. Our time is much employed in the regular discharge of our duties as Superintendent, and we have not been able to devote that time to the *Journal* which its interests demand. With many thanks to the associate editors and to our brother teachers, we retire from the office with which the favor of the Association has for the last two years entrusted us.

AMERICAN SALT.—The annual salt product of the United States amounts to 12,370,000 bushels. New York is the greatest producer, her amount being 6,000,000 bushels; Virginia next, her product being 3,500,000 bushels. In eleven States the manufacture of salt is carried on, the great sources of supply being salt brine obtained from deep wells far removed from the ocean.—*Scientific American*.

ITEMS.

We have received an article on the State University by Mr. E. P. Cole, which comes too late for the December number, as, in order that notice of the Annual Meeting may reach our subscribers, we must go to press in advance of the usual time.

FIRST PHONETIC READERS.—We announce to our readers that a Phonetic First Reader has been prepared and published by the LONGLEY BROTHERS, of Cincinnati. We are using it in the schools of this city, and find it just what we need.

The first two parts of Prof. Agassiz' "Contributions to the Natural History of the United States of America," has appeared.

The teachers of Madison County will hold an Institute at Pendleton, commencing Monday, Dec. 21st, and continue through the week. One Institute is of more value to teachers, practically, than a dozen Associations. Let there be a good gathering.

ERRATA.—"Free Translations," November number, 18th line from the end instead of "*Collegium juvat*," read "*Collegisse juvat*."

A lady, who can give good recommendations, desires a situation to teach Painting and Drawing. Address the Resident Editor of the *Journal*.

The following humorous toast was given at a late Railroad Festival: "Our mothers: the only faithful *tenders* who never misplaced a *switch*."

PERU TOWNSHIP LIBRARY.—The Librarian of the Peru Township Library, writing for the *Peru Republican*, says: "I have thought it might not prove unprofitable, but interesting, to many to know with what success this part of our educational privileges given by the State to its citizens has met in the hands of those for whom it was intended, and by this means aid in extending still further the advantages it offers to all in the way of useful reading. The whole number of books taken out for the year, commencing November 27th, 1856, and ending November 27th, 1857, amounts to 2,024. The whole number of volumes in the Library is about 500, which would show an average of each book being read four times during the year. But as there are many interesting and valuable books, suitable to the tastes of the most intelligent, and, to some extent, above the comprehension of the young, that have not been read so much, it shows that some have been read still oftener.

SCHOOL MASTER ABROAD.—We copy the following note *verbatim, et literatim, et spellatim*. We presume it was written by a would-be "*scool teacher*," while smarting under disappointment from a rejection of his application for a certificate from the County Examiner. We sympathise with him in his regard for "poor children," except in one important particular, that we believe "poor children" as much entitled to a good education as their rich neighbors:

perpetually calculating tasks and adjusting nice chances; it did very well before the flood, when a man could consult his friend upon an intended publication for a hundred and fifty years, and then live to see its success for six or seven centuries afterwards; but at present, a man waits, and doubts, and hesitates, and consults his brother and his particular friends, till one fine day he finds that he has lost so much time in consulting his first cousins and particular friends that he has no more time to follow their advice.—*Sidney Smith.*

THE MICROSCOPE AND TELESCOPE.—The relative powers of these two instruments are thus described and contrasted by the late Dr. Chalmers, in one of his scientific lectures: "The one reveals to me a system in every star; the other, a world in every atom. By the one I am led to believe that this great globe itself, with all the mighty burden of its oceans and continents, is but as a single grain of sand on the high fields of immensity; the other teaches me that every grain of sand may harbor the tribes and families of a busy population. The one tells me of the insignificance of the world I tread upon; the other redeems it from all insignificance, for it tells me that on the leaves of every forest, in the flowers of every garden, and in the waters of every rivulet, there are worlds teeming with life, and numberless as are the glories of the firmament. The one suggests that far and beyond all that the telescope has yet revealed, there may be fields of creation which sweep immeasurably along, and carry the impress of the Almighty's hand to the remotest shores of the universe. The other intimates that within and beneath all that minuteness disclosed by the microscope, there may be a region of invisible things; that could we draw aside the mysterious curtain that shrouds it from our senses, we should see there a theatre of as many wonders as astronomy has unfolded; a universe within the compass of a point, where the wonder-working God could raise another mechanism of worlds, and animate them all with His power."

ANNUAL MEETING OF THE TEACHERS' ASSOCIATION.—This will be at Indianapolis, on Tuesday, Wednesday, and Thursday, Dec. 29, 30, and 31

Order of Exercises.—Tuesday, 3 o'clock, P. M., Organization.

Tuesday, 7 P. M., Address by Zaccheus Test, Esq., of Richmond.

Wednesday, 9 A. M., Reports of Officers of Institution, and Resident Editor of *School Journal*.

Wednesday, 2 P. M., Report on Normal Schools and discussion.

Wednesday, 7 P. M., Address by Hon. G. W. Julian.

Thursday, 9 A. M., choice of Officers of Association, and Editors of the *Journal*.

Thursday, 7 P. M., Address, by Prof. Butler, of Wabash College.

The committee have not yet been able to perfect their arrangements. Other persons have been written to, and other reports and addresses may be expected.

The arrangements entered into with the railroads will enable all members of the Association to come and go on half fare, with the exception of the Terre Haute & Richmond and the Bellefontaine Roads. Arrangements will also be made for the free entertainment of all members of the Association.

By Order of EX. COMMITTEE.

17 1850

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